Rough and Ready Volunteer Fire Department
Fire Station Construction Project
Environmental Assessment

Prepared for

Rough and Ready Volunteer Fire Department

Prepared by

Department of Homeland Security, Federal Emergency Management Agency

and

EcoSynthesis Scientific & Regulatory Services, Inc.

16173 Lancaster Place

Truckee, CA 96161

July 15, 2010

Table of Contents

Figure

Appendices

List of the 24 documents and maps that are included in the Appendices appears on page 36.

The following technical reports are cited in the text and accompany the electronic submittal of the environmental assessment:

Historic Properties Report: Windmiller, 2009

Geotechnical Report: Holdrege and Kull, 2009.

Biological Inventory/Assessment Report: Juncosa, 2010.

List of Acronyms

APE	Area of Potential Effect
BA	Biological Assessment
BMP	Best management practice
CARB	California Air Resources Board
CEQA	California Environmental Quality Act
cfs	cubic feet per second
DHS	Department of Homeland Security
EA	Environmental Assessment
EHP	Environmental and Historic Preservation review
EO	Executive Order
FEMA	Federal Emergency Management Agency
ISO	Insurance Services Office
LOS	Level of Service (traffic)
NCNRR	Nevada County Natural Resources Report
NEPA	National Environmental Policy Act
NFPA	National Fire Protection Association
NID	Nevada Irrigation District
NPDES	National Pollutant Discharge Elimination System
NRCS	Natural Resources Conservation Service
NRHP	National Register of Historic Places
NSAQMD	Northern Sierra Air Quality Management District
NWI	National Wetlands Inventory
PM10	(Airborne) particulate matter smaller than 10 microns (micrometers)
RRVFD	Rough and Ready Volunteer Fire Department
SHPO	State Historic Preservation Office
SIP	State Implementation Plan (California Air Resources Board)
TSS	Total suspended sediment
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service

1 INTRODUCTION

This Environmental Assessment (EA) has been prepared in accordance with

- the National Environmental Policy Act (NEPA) of 1969;
- the President's Council on Environmental Quality regulations to implement NEPA (40 Code of Federal Regulations Parts 1500-1508); and
- FEMA's regulations implementing NEPA (44 CFR Part 10).

FEMA is required to consider potential environmental impacts before funding, or approving funding, or approving Applicant's proposals. The purpose of this EA is to analyze the potential environmental impacts of the Rough and Ready fire station construction proposal. FEMA will use the findings in this EA to determine whether to prepare an Environmental Impact Statement (EIS) or a Finding of No Significant Impact (FONSI).

The proposed project has received approval from Nevada County. As part of this process, the County complied with the California Environmental Quality Act (CEQA); compliance included preparation of a mitigated negative declaration and notice of determination. The present EA incorporates but also expands on the information and analysis upon which the CEQA compliance depended; the EA also addresses additional subject areas that are not normally part of CEQA impact evaluations, but are required under NEPA.

The proposed project is the relocation of an existing fire department operation from its present base of operations, in a parcel whose zoning contrasts with surrounding zoning and land uses, to a new station to be constructed in the center of Rough and Ready, in an area zoned for commercial land use. The existing emergency response operations are not expected to increase or decrease their level of activity, nor add to the current fleet of five emergency vehicles. No replacement of fire engines or other vehicles is included in the project, although the proposed new station building would be large enough to accommodate current generation engines. However, even in the event of future replacements, this would be a one-for-one exchange, because the proposed new station would have five bays, exactly the number that accommodates the whole current fleet with no allowance for an increase in number of vehicles.

For these reasons, the analysis of operational environmental impacts is limited, because these operations are an existing condition and would neither increase nor decrease as a consequence of the project. Project impacts that relate specifically to the change of location are identified and evaluated.

2 PURPOSE AND NEED

2.1 Background

The purpose of the Applicant's proposal is to construct an adequate, safe fire station for the Rough and Ready Volunteer Fire Department (RRVFD or Department; actual legal name is Rough and Ready Fire Protection District). Funding for the purpose (to be used in conjunction with matching funds) is being sought from the American Recovery and Reinvestment Act Assistance to Firefighters Station Construction Grants (ARRA-SCG; application no. EMW-2009-FC-05324).

The RRVFD is one of the few remaining all-volunteer departments in Nevada County. The department consists of 22 volunteers, operating out of a single station serving one of the ten fire districts in Northern California's rural western Nevada County (Figure 1). For the purposes of this report, all personnel that are directly involved in the management and implementation of RRVFD activities are referred to collectively in this report as employees. The district spans approximately ten square miles in the rugged, wooded, mountainous terrain of the Sierra Nevada foothills, and has "auto-aid" agreements that require it to respond to fires, vehicle accidents, and medical emergencies in three of the neighboring fire districts.

2.2 Description of Existing Conditions

Support facilities for the RRVFD are currently housed in a tin barn that was originally constructed only to store the department's two engines. Despite several additions, the existing structure is inadequate in size and configuration and has numerous deficiencies including poor ventilation, no air conditioning, poor heating, inadequate and unsafe wiring, mold, non-potable water, an undersized and un-expandable septic system of unknown location, no sleeping quarters, almost no insulation, poor lighting, no fire suppression system, an undersized generator, restroom and access doors that are not compliant with the Americans with Disabilities Act, and a severely leaky roof that has proven to be impossible to fix. Some of the building's deficiencies and non-compliances are itemized in a letter of July 29, 2009, from the Nevada County building department (Appendices, item 2.2).

In addition to the safety and code/legal items listed above, the current station is much too small for the amount of equipment and personnel that is required to provide fire protection to the district. The building has no area to work on equipment and the only place available to do repairs and to decontaminate the medical bag is the kitchen counter. The RRVFD currently has 22 people on the roster and the 400 sq. ft. training room barely accommodates all the firefighters at once, especially if they are doing anything other than sitting at a table. The current station does not have any sort of washer or dryer for cleaning turnouts or wildland gear, and there is no place to install laundry equipment. In order to free up space in the station, the RRVFD had to purchase a 320 sq. ft. cargo container for storage of the equipment and spare hose. The RRVFD is in the process of replacing the 21-year-old fire engine and has found it very difficult to find an equivalent engine with a length and height that will fit in the existing engine bay. The existing fire station is in a residential neighborhood and is operating under zoning that differs from the zoning of all of the surrounding lands (see Figure 1). Operation of the fire department from the current location has many adverse effects including disturbance of neighbors and adverse effects on wildlife from road mortality and noise disturbance.

Eco Synthesis
SCIENTIFIC & REGULATORY SERVICES INC

Rough and Ready Fire Station Environmental Assessment

Figure 1. Land use (zoning) within fire department service area.

APN 052-270-019, -22, and -028 (portion)

0 1000 2000 3000 4000

Scale 1 : 24,000 (1 in = 2,000 ft)

N

Legend

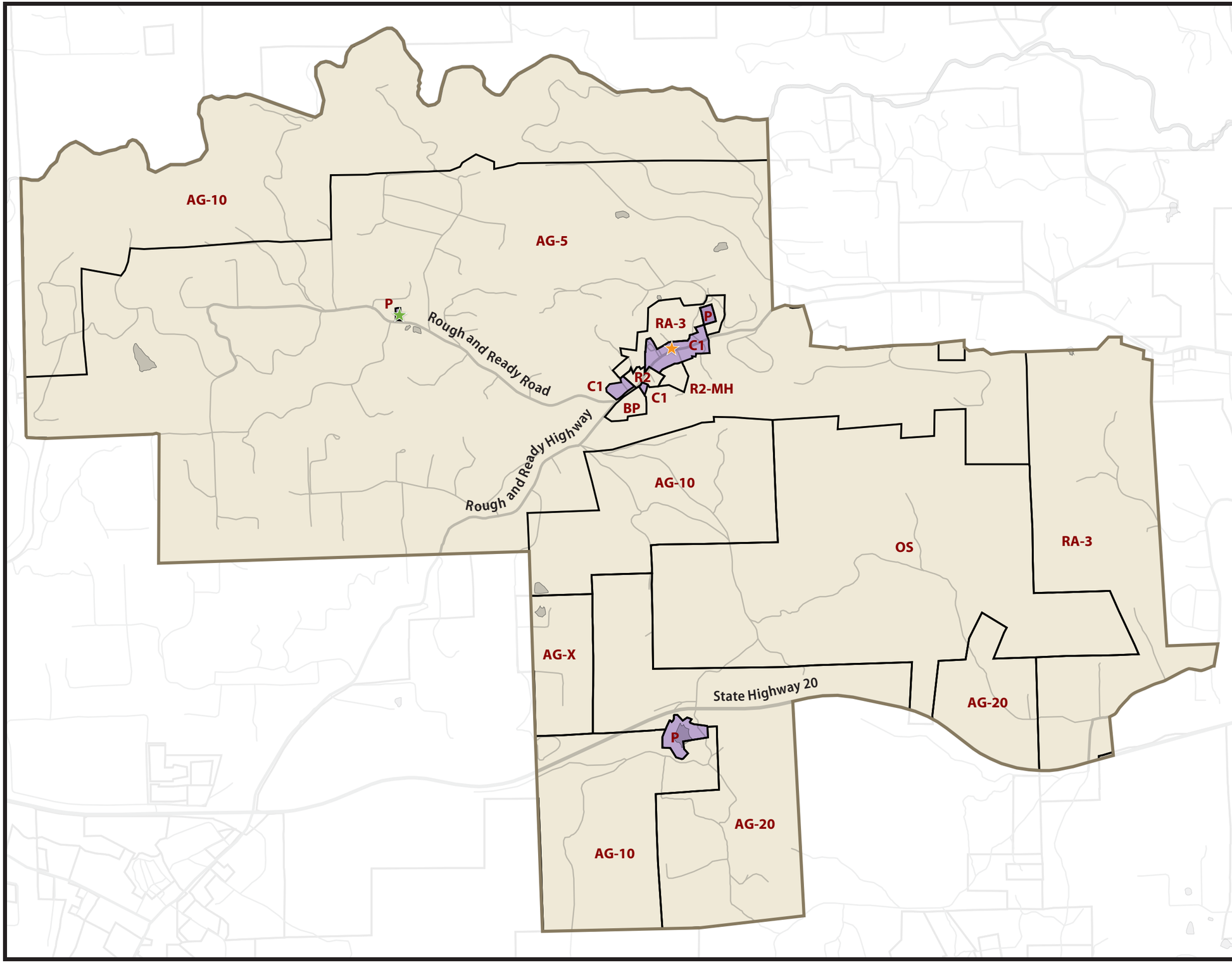
- Rural agricultural/residential zoning
- Commercial/public zoning
- Existing fire station
- Site of proposed new fire station

Zoning Codes

AG-5	General Agricultural, one dwelling per 5 acres
AG-10	General Agricultural, one dwelling per 10 acres
AG-20	General Agricultural, one dwelling per 5 acres
AG-X	General Agricultural
C1	Neighborhood Commercial
OS	Open Space
P	Public
RA-3	Residential Agricultural - High Density
R2	Residential Agricultural - Medium Density

Notes

The two major travel corridors within the Department's service area are Rough and Ready Highway and State Highway 20. Rough and Ready Road is a small, dead-end road through rural agricultural/residential lands. See Section 4.2.1 for additional discussion of land use and zoning.



As this description of the existing fire station makes clear, the present situation is legally untenable, jeopardizes firefighter safety, and compromises fire protection operations in major respects. Should enforcement action be taken by County building department staff, the RRVFD's ability to provide critically important emergency services to the public would be at risk. For these reasons, it is a necessity rather than merely a Department desire to make a substantial facilities improvement.

Since the existing station has had so many additions, expanding or bringing it up to current codes would be cost prohibitive. The discussion of Alternatives (Section 3 of this EA) identifies the various available means and locations of remedying the current facilities deficiencies.

2.3 Present Station Location

2.3.1 RESPONSE TIME

The location of the current station within the fire district is far from being centrally located within the service area. Specifically, it is about one mile up a dead-end rural road (Rough and Ready Road, not to be confused with Rough and Ready Highway, which, albeit two-lane, is the major thoroughfare through the middle of the RRVFD service area). From the current location, it is not possible for the Department to meet the response time standards that are established by the National Fire Protection Association (NFPA). Specifically, NFPA standard 1720 (NFPA, 2010) requires a response with a minimum of six fire protection staff within 14 minutes or less to an emergency site that is less than eight miles away. The RRVFD is unable to meet this standard at the current location, due to the distance that firefighters must travel to arrive at the station in order to initiate a response, added to the distance that engines must then travel from the current station to the more remote areas of the service area. A central location would enable the Department to meet the mandated response time throughout the service area. Although the NFPA standards are not mandatory, except when made a condition of acceptance of public funding, they are very important to the community because homeowners insurance companies base their coverage and rates on Insurance Services Office (ISO) compliance, and the ISO in turn bases its standards on NFPA standards; thus, it will become increasingly difficult for homeowners to get fire insurance if RRVFD continues to be unable to meet NFPA 1720.

Response time standards are extremely important in the project region, because the history of recent highly damaging fires in the Sierra Nevada, in particular in the foothills, has been that these have occurred during very windy periods, and that the fires grew, sometimes in a matter of a few tens of minutes, from small ones that could probably have been contained quickly to large ones that then burned uncontrollably through hundreds of acres of wildland and inhabited rural areas.

This is not an uncommon pattern for fires in wildlands or wildland-urban interface in California, and is corroborated by numerous examples. The most recent significantly damaging fire in the nearby Sierra foothills region (49 Fire [2009] in Auburn, approximately 20 miles from the RRVFD service area) grew from initiation to a size that was not quickly containable in a matter of some tens of minutes and subsequently burned 275 acres and many structures. An example from the RRVFD area itself is the Trauner Fire (1994), which started right in Rough and Ready about 100 yards from the proposed station location and burned dozens of structures in a few hours. Several other large and well-known fires also followed the same wind-driven rapidly spreading pattern (Forty-niner Fire, Nevada County, 1988; Angora Fire, Lake Tahoe Basin, 2007; East Bay Hills Fire, 1991). In the case of the Angora Fire, the well documented details of the fire behavior (available

from many sources including http://www.fs.fed.us/r5/angorafuelsassessment/) show that, during the first few hours, the fire spread at an average speed of nearly 120 feet per minute, which dramatically demonstrates the extreme importance of every minute of response time under the windy and low-humidity conditions that prevail for most of the year in California. Numerous examples also exist of the opposite pattern, namely, a fire which was quickly contained, even during windy conditions, due to very rapid response.

2.3.2 INCOMPATIBILITY WITH SURROUNDING ZONING

Although the Nevada County General Plan and Zoning Ordinance allow for operation of a fire station within many different zoning categories (subject to issuance of a Use Permit), including residential areas, the actual functional reality of a fire station is not particularly compatible with the setting and intent of low-density rural agricultural and residential lands. As can be seen in Figure 1, the portions of the service area that are zoned for public and commercial uses are very limited, and land within this area is infrequently available on the market. Accordingly, 13 years ago, the RRVFD acquired a parcel in the center of town with the intent of building a new fire station on the property. Three years later, RRVFD acquired another parcel adjacent to the first one, and has since combined them into one parcel of approximately 2.5 acres. No suitable alternative site is available at present that meets the project objectives (also see Section 3.3.2 and Appendices, item 3.3.2).

2.4 Specific Project Objectives

The project objectives, which are not only reasonable expectations in light of the services that the RRVFD provides to the public, but are also required in order to comply with building and worker safety codes, NFPA response time standards, and applicable County policies, are summarized as follows:

1. Modify, construct, or otherwise obtain use of a code- and worker-safety compliant building that can house the RRVFD engine fleet and allow for replacement of at least one aging engine, on a one-for-one basis, with one that is currently in production. (The current generation of engines, being larger, require an engine bay that is longer and higher than the largest one at the present building).
2. Operate the RRVFD from a site that is more centrally located within the service area than the present one, specifically one that is compatible with the surrounding land uses and does not increase, or preferably reduces, the effects on the natural and human environment that result from the Department's operations.
3. Minimize land and building costs and, in particular, be affordable within the limitations of available grant and matching funds.

2.5 Need Statement

In summary, the present RRVFD fire station is

- located at a site from which it is impossible to meet response time standards;
- not safe for employees nor compliant with building codes;
- inadequate in size to allow for normal fire department activities; and

- too small to allow for replacement of aging engines with any current-generation ones (which are larger).

Accordingly, the RRVFD has acquired a suitable site (discussed below) and applied for grant funds to contribute to construction of a new station that meets the stated Department needs and project objectives.

2.6 Connected Actions

Other than relocation of the RRVFD operations to the new location, there are no other connected actions, and there are no similar actions that involve the project of which the RRVFD or the Nevada County Planning Department is aware.

Utility services (electricity and telephone lines) to the site already exist, and other than the branch lines that serve the parcel itself, there will not need to be any replacement or enlargement of the main utility lines that pass by. Water supply and wastewater disposal will be achieved within the Department's parcel, by a well and septic system. This is normal for land development in the project region.

There will be no off-site road improvements.

The applicant's proposal is not interdependent upon any other larger action, nor does it depend for its justification upon any other action.

3 ALTERNATIVES

3.1 No Action Alternative

Under the No Action Alternative, FEMA would not contribute grant funding to support implementation of the Project. The RRVFD would continue to operate out of the existing structure and, due to the space limitations as summarized in Section 2, would be unable to upgrade or replace fire protection equipment if and when it becomes non-functional and unrepairable. Effectiveness of emergency response would remain compromised. The Department would continue to be unable to meet the NFPA response time standard for rural areas (see Figure 1 and discussion above in Section 2). This inability jeopardizes life and property within the service area. The Department would remain vulnerable to citation for various building and/or safety code violations which cannot be remedied at the current station, with unknown enforcement consequences.

3.2 Proposed Project

FEMA's proposed action is providing financial assistance to RRVFD that would contribute toward the construction of a new fire station at the proposed site location as described below, using a combination of grant and matching funds. The actual construction is referred to below as the Proposed Project. The context and layout of the project is shown in the Aerial Map that was included in the EHP submittal (Appendices, item 3.2).

The new station would be 8,167 sq ft, split approximately half and half between engine bays and administrative/living quarters. It would have five engine bays, gender-specific sleeping quarters and bathrooms, disabled person bathrooms, decontamination room, staff/day room, kitchen, offices, training room, 45kw emergency generator, fire sprinklers, smoke/fire/CO alarm and adequate storage and work area. The newly acquired exhaust removal system would be relocated from the existing station to the new station.

The average age of the fleet is 18 years old, and new fire protection vehicles that will ultimately be needed to replace existing ones are considerably larger than they were 20 years ago. Accordingly, the size of the engine bays of the new station would be large enough to accommodate the existing five apparatus, while allowing for larger engines in the future, and still maintaining room to walk around the vehicles. Another goal for the engine bays was to have as many drive-through bays as possible to improve safety by reducing the number of accidents that happen while backing equipment; four of the five engine bays would be drive-through bays. The fifth smaller bay is designated for the rescue squad and is a back-in stall. Adjacent to the engine bays would be a dressing/gear room, a decontamination room, and a room for the air filling station.

The primary goals for the administrative and living quarters portion of the building are to provide sleeping quarters for up to six firefighters in two different bedrooms and a larger, more functional training room to accommodate training of all 22 firefighters at once. In addition, the most recent ISO review suggests that the RRVFD do quarterly joint training with the neighboring fire district, but when they come to train with us, the RRVFD are unable to accommodate them in the small training room. The floor plan includes a 900 sq. ft. training room in order to accommodate 22+ firefighters in a manner conducive to learning.

The remainder of the living quarters would include a staff/day room and a kitchen/dining area. The administrative space would include a small reception area and offices for the part-time administrative assistant, the chief, and the duty officer.

3.3 Alternatives Considered and Dismissed

3.3.1 MODIFICATION OF EXISTING BUILDING

Additions to, or reconstruction of, the existing building are infeasible or otherwise clearly fail to achieve the project objectives for various reasons:

Building codes would essentially require demolition and complete reconstruction of the existing building. Under this circumstance, the RRVFD would be without any location to store equipment for the duration of the demolition and construction effort (10-12 months). This would inevitably entail higher costs than the Applicant's proposal. Additional costs would include demolition and costs of storing equipment on an alternative temporary site. Also, this alternative would increase the risk to life and property due to interference with present fire protection activities. Thus, demolition of the existing building and construction of a new station at the current station location fails to meet Objective 3 (see Section 2.2) and was therefore eliminated from further consideration.

3.3.2 ALTERNATIVE SITE LOCATION

There is no alternative site that offers the combination of being a central location on or very close to a major thoroughfare (necessary for response-time reasons, and desirable for other public service reasons), size and constructability, and economic feasibility (land cost).

As can be seen from Figure 1, in order to achieve the project objectives, the site of a new station should preferably be located in one of the parcels zoned C-1 or P near the center of the RRVFD service area. The availability of suitable real estate is discussed in the letter from Network Real Estate (Appendices, item 3.3.2); in brief, it shows that the proposed project site is the only one that meets project objectives and is available for the construction of a new fire station. Therefore, there is no feasible alternative site location that meets Objective 2 (Section 2.2).

3.3.3 ALTERNATIVE BUILDING DESIGN

The proposed building design is the minimum size of structure that accommodates the Department's current fleet of five emergency vehicles, which cannot be reduced without compromising its ability to respond to the range of emergencies that occur within the service area. All of the specific elements of the building design (training room, sleeping quarters, and so on) are basic to a modern fire response operation, and elimination of one or more of these elements would neither meet project objectives (expand the current inadequate facilities) nor be a cost efficiency, because adding them in the future, after completion of a partial structure, is so much more expensive than constructing all of the necessary facilities at one time.

Therefore, there is no alternative building design that meets Objectives 1 and 3 (Section 2.2).

3.3.4 ALTERNATIVE PROJECTS WITH SIMILAR BENEFITS

Relocation to a smaller building does not meet project objectives at all (specifically Objective 1), because one of the primary reasons for the project is that the current space is too small.

It would be theoretically possible for the RRVFD to lease a structure and base its emergency response operations there. However, in order to achieve project objectives, this structure would need to meet all of the building configuration requirements as explained above (beginning with, but not limited to, having space to house the current engine fleet, including at least one bay with sufficient length and height to accommodate a future replacement engine). The leased structure would also need to be located within one of the parcels noted above and shown in Figure 1. No such structure exists in the service area (and in particular not in a central location), therefore there is no alternative project that is feasible, meets any of the three project objectives, and would have similar benefits to those of the Proposed Project.

4 AFFECTED ENVIRONMENT, IMPACTS, AND MITIGATION

4.1 Physical and Natural Resource Environment

4.1.1 GEOLOGY AND SOILS

The site geology consists of Jurassic-aged, unmetamorphosed gabbro and diorite rocks of the Pilot Peak Plutonic Complex. The site is located within the Foothills Fault System, which is designated as a Type C fault system, with low seismicity and a low frequency of recurrence. The site is not located within an active fault zone (activity within the past 11,000 years) as defined and mapped pursuant to the Alquist-Priolo Earthquake Fault Zoning Act (see Holdrege & Kull, 2009).

The soils that occur at the site are Trabuco Rock Outcrop complex soils with low permeability loam and heavy loam underlain by clay and clay loam over weathered granitic rock. Only one soil type is mapped within the site (Brittan [1974] and as shown on Web Soil Survey); the soil survey map and report from the latter is included in the Appendices (item 4.1.1A). A portion of the site, where parking is proposed, is covered by existing fill materials to an approximate depth of two feet.

The geotechnical study concluded that the site is suitable for construction of the proposed project, and that the risk of seismically induced hazards is remote.

Finally, the USDA Natural Resources Conservation Service determined that the site does not contain Prime, Unique, or Farmland of Statewide or Local Importance, or any wetlands (letter from Jason Jackson, NRCS, dated January 25, 2010, and accompanying form AD-1006 are included in the Appendices, item 4.1.1B).

Alternative 1: No Action

There would be no environmental impacts related to geology and soils from the No Action Alternative.

Alternative 2: Proposed Project

There would be no environmental impacts related to geology and soils from the Proposed Project. Underground storage tanks were used by a business formerly present on the site. The final notice from Nevada County Department of Environmental Health for the underground storage tank closure permit, which stated that site sampling noted no groundwater contamination, is included in the Appendices (item 4.1.1C). Standard methods for mitigating the possible structural unsuitability of the existing fill materials and for addressing other during-construction soils issues are provided in the geotechnical study report (Holdrege & Kull, 2009).

4.1.2 AIR QUALITY

Nevada County lies within the Mountain Counties Air Basin, Northern Sierra Air Quality Management District (NSAQMD). Overall air quality in Nevada County is good with the exception of levels of two specific pollutants (ozone and PM10). Ozone is an air pollutant that is not emitted directly by internal combustion engines (such as those of automobiles) but is generated as a secondary consequence of their emissions of other compounds. The western part of the County is in attainment of all federal air quality standards with the exception of the 8-hour ozone standard (which is 0.08 parts per million). This is a consequence of the wind-distributed spread of this gas

from the major urban centers of the San Francisco Bay area and the greater Sacramento area (including contiguous surrounding urbanized and suburbanized areas). Federal clean air laws require areas with unhealthy levels of ozone, inhalable particulate matter, carbon monoxide, nitrogen dioxide, and sulfur dioxide to develop comprehensive plans, known as State Implementation Plans (SIPs), to describe how an area will attain national ambient air quality standards.

SIPs are compilations of new and previously submitted plans, programs, district rules, state regulations and federal controls. For the present project and the NSAQMD (where the only federal air quality standard that is not in attainment is the 8-hour ozone standard), the attainment criterion that is most relevant is the goal of reducing vehicle miles driven by 3 percent.

The 1990 amendments to the federal Clean Air Act set deadlines for attainment based on the severity of an area's air pollution problem. In the Attainment Plan for NSAQMD, the District has adopted all applicable reasonably available control technologies, including requiring an emission offset program for major air pollution sources, ensuring that federally funded projects such as highway improvements do not make the problem worse, and requiring that Western Nevada County reduce its emissions of ozone precursors by at least 3 percent per year. Most necessary reductions are expected from Statewide measures and from cars becoming cleaner. Additional requirements vary depending on an area's classification, which is tied to a demonstration that the standard can be met by a specific year.

Air quality standards in California are more stringent (have lower attainment thresholds) than federal standards, consequently portions of Nevada County are in non-attainment of the state 1-hour and 8-hour ozone and PM10 standards. Locally substantial sources of ozone-producing pollutants occur during seasonal and peak traffic flows in the Interstate 80 corridor, especially in eastern Nevada County (remote and downwind from Rough and Ready). Exceedances of PM10 standards are primarily a result of wood smoke from the use of woodstoves for heating and from debris burning, especially for project land-clearing purposes, as well as from forest fires and/or prescribed burning for forest fuel-management purposes. The project site is largely developed already, therefore little vegetation removal and disposal is needed, compared with a typical undeveloped site in the region. Dust is typically generated by demolition and excavation activities, for which reason NSAQMD requires the preparation of a Dust Control Plan for any project that will disturb more than one acre of land surface. The Proposed Project would result in disturbance of 1.1 acres, so a Dust Control Plan is required by District rules.

NSAQMD reviewed the project during the County's CEQA compliance process and found that the project was consistent with its District rules that are established pursuant to the State Implementation Plan (SIP), but recommended several during-construction mitigation measures; essentially the elements of the Dust Control Plan (see Appendices, item 4.1.2).

During preparation of the EA, Sam Longmire (NSAQMD) was consulted by telephone; he confirmed that the District's only air quality concerns related to during-construction impacts, and that the reduction in vehicle miles driven as a consequence of the Proposed Project would contribute to the reduction in regional vehicle miles that is established in the SIP.

Nevertheless, measures are included to minimize adverse air quality impacts from site clearing (vegetation disposal, dust, and so on). These mitigation measures are identified below.

All heavy equipment operators in the County comply with the Title V regulations for air quality protection and registration of heavy equipment that is used to perform public sector construction work.

Alternative 1: No Action

No change in impacts on air quality would be expected to result from the No Action Alternative. The project region would continue to be in non-attainment for the federal 8-hour ozone standard. In the future, the RRVFD would be incapable of reducing vehicle miles driven to respond to emergencies, and would be incapable of (or have much more difficulty in) replacing existing aging Department vehicles with ones that emit less pollutants, because available information indicates that newer engines will not fit in the current station bays. Therefore, the RRVFD would be incapable of contributing to the SIP's goals of reducing regional vehicle miles driven.

Alternative 2: Proposed Project

CONSTRUCTION IMPACTS

During construction, the project would result in some potential moderate short-term air quality effects, but not ones that would contribute significantly to non-attainment of the 8-hour ozone standard. However, without mitigation they could potentially be either individually significant or, if not, would contribute to cumulative particulate air pollution (which may or may not exceed the PM10 standard). Pursuant to the recommendations of the NSAQMD, the following mitigation measures would be implemented to ensure that the project's short-term construction-related impacts on air quality are reduced to a less-than-significant level and are in conformance with state and local standards. Essentially, these measures are the ones that would be included in the Dust Control Plan that is required due to the fact that the project will disturb more than one acre of soil surface.

Mitigation Measures

4.1.2A. The RRVFD shall utilize alternative to open burning of vegetation material on site unless all of these alternatives are deemed infeasible by the Air Pollution Control Officer. Such alternatives including chipping, shredding, grinding, use as firewood, and/or conversion to biomass fuel. An approval letter shall be obtained from NSAQMD indicating the means of disposal to be used.

4.1.2B. Prior to the issuance of the grading permit, if the project will need to disturb more than one acre by grading or vegetation removal, the RRVFD shall prepare a Dust Control Plan to be approved by NSAQMD. If required, this plan shall include the following measures to be shown on the grading plans and implemented throughout construction:

- All materials or surfaces that are excavated, stockpiles, or graded shall be sufficiently watered, treated, or covered so as to prevent fugitive dust from leaving the property boundaries. Watering should occur at least twice daily during dry weather, with complete coverage of all active disturbed areas.
- All unpaved areas, including unpaved roads, that experience construction-related equipment or vehicle traffic shall be watered or otherwise treated to prevent the generation of fugitive dust.
- All on-site vehicle traffic shall be limited to a maximum speed of 15 mph on unpaved surfaces.

- To control the generation of wind-blown dust, all land clearing, grading, earth moving, or excavation activities shall be suspended when winds exceed, or are expected to exceed, 20 mph.
- All soil materials transported off site shall be either sufficiently watered or securely covered to prevent loss of material, and shall have at least six inches of freeboard in the bed of the truck.
- As long as unprotected disturbed soil surfaces are exposed during the construction period, paved roads adjacent to the project shall be swept or washed at the end of each day, or more frequently, as necessary to remove accumulations of silt or mud which may have been generated from construction activities, in order to prevent the entrainment of fine soil particles into the air by passing vehicles.
- As soon as is reasonably possible, native vegetative ground cover shall be re-established on disturbed final soil surfaces by means of seeding and temporary irrigation as needed.

4.1.2C. The following additional measure will be implemented to ensure compliance with other requirement of NSAQMD and California Air Resources Board:

- Any equipment with a portable engine attached that has a brake horsepower ration of 50 or more that does not provide motive power to the equipment, shall have a permit from the NSAQMD, or the engine may instead have a Portable Equipment Registration Program registration issued by the Board. In addition to engines, any ancillary equipment that emits pollutants to the air exceeding two pounds per day shall also be registered.

OPERATIONAL IMPACTS

The Proposed Project would have a significant long-term beneficial impact on the NSAQMD's plan to remedy the present regional non-attainment of the federal 8-hour ozone standard, because the Proposed Project will result in a reduction of vehicle miles driven that is greater than 3 percent (the Attainment Plan's goal). The non-attainment of the 8-hour ozone standard is primarily a consequence of pollutant sources that are outside the region.

From an operational standpoint, the great majority of the emergencies to which the RRVFD responds (estimated at 75 percent by RRVFD staff) require the responding vehicles to travel down Rough and Ready Road to Rough and Ready Highway, at a point very close to the site of the proposed new station, a round trip distance of two additional miles driven for each responding vehicle, and sometimes multiple vehicles are necessary for adequate response to the situation. There are also additional round trip vehicle trips from Rough and Ready Highway to the existing station which must be driven by any employees who do not live in the small portion of the service area that is accessed by Rough and Ready Road. These include both the vehicle trips of daily employees and the call-response trips driven by firefighters to arrive at the existing station (on average, about 10 firefighters per call). For example, from the proposed new station site, the furthest road distance to a potential emergency call site is about three miles. For this example, the reduction in vehicle miles driven for the emergency response is therefore about 25 percent (four mile distance from the present station reduced to three miles from the proposed new station site). This mileage reduction applies to the roughly 75 percent of the emergency responses to locations that are accessed by first driving to Rough and Ready Highway. For the 25 percent of calls from sites that are along, or accessed via, Rough and Ready Road, the mileage impact would vary depending upon whether the site is closer to Rough and Ready Highway or to the present station

location. However, the mileage reduction that accrues from the majority of calls is so great that it is certain that the Proposed Project would result in a reduction in vehicle miles driven that is more than three percent and would therefore contribute significantly to the SIP's goal of three percent reduction in vehicle miles driven within the NSAQMD.

Also, although replacement of emergency vehicles is not a part of the Proposed Project, the project will make it possible in the future to replace aging engines, when they reach the end of their service lifetime, with newer ones that emit lower levels of air pollutants per mile driven. This potential contribution to regional air quality improvement cannot presently be quantified.

4.1.3 CLIMATE CHANGE

Sources of greenhouse gases (primarily carbon dioxide) that are relevant to the proposed project include the operation of construction equipment, operation of fire protection equipment for training and emergency response, and combustion of structures and vegetation when fires occur.

Alternative 1: No Action

Under the No Action Alternative, response to structural and wildfires would continue to be delayed and impaired by the unsuitable location and inadequate facilities of the existing fire station, therefore, releases of greenhouse gases from vehicle travel and from combustion will continue at approximately the rate that occurs under existing conditions.

Alternative 2: Proposed Project

Under the Proposed Project, firefighting responses to most parts of the RRVFD service area will be more rapid than they are at present. The existing station is located approximately one mile from the nearest highway, at the end of a dead-end road, and firefighters must travel to the station before responding to a fire; this additional travel results in a response time that is several to many minutes longer, for most parts of the RRVFD service area, than would be the case for the Proposed Project.

As long as an unsuppressed fire is burning, it results in releases of greenhouse gases; therefore delayed firefighting response results in some magnitude of increased greenhouse gas release. Also, under the windy conditions that often occur in the project region during the most active "fire season" (roughly June through October), the rate of increase in the acreage and amount of vegetation fuel that is burned is very rapid, so the fires that result are larger. Larger vegetation fires also take longer to extinguish, from the time that responders arrive, than do smaller ones. Consequently, in the rare circumstance that response is not quick enough for the fire to be contained almost immediately, the increased area that is ultimately burned (and amount of greenhouse gases that are released) is sometimes very large. Additional discussion of the importance of response time to the magnitude of fires (which in turn determines the amount of greenhouse gases which they release) is found in Section 2.3.1.

For these reasons, improving response time can reasonably be expected to result in some unquantifiable degree of reduction in releases of greenhouse gases by fires. Also, as discussed in Section 4.1.2, basing fire department operations in a more central location would reduce vehicle miles driven, both by employee vehicles in order to arrive at the station and by Department vehicles in responding, which will also result in a small reduction in greenhouse gas emissions. See

also Section 4.2.4 for additional detail on average number of monthly vehicle trips which would be reduced in length as a consequence of the Proposed Project.

Absent a numerical standard of the threshold of significance for this particular subject, we would subjectively judge the combination of impacts to be expected on greenhouse gas emissions to be a potentially significant, but moderate, long-term beneficial impact.

4.1.4 WATER RESOURCES AND QUALITY

Water Supply

The project site is located in the Deer Creek watershed of the Sierra Nevada foothills, a portion of the Upper Yuba hydrologic unit (HU 18020125). Deer Creek is tributary to the Yuba River, Sacramento River, and the Pacific Ocean. Deer Creek is navigable in fact, and commercial navigation of one sort or another currently occurs on the Yuba River and Sacramento River.

The Nevada County Natural Resources Report (NCNRR; Nevada County, 2002) divided the county into a large number of sub-watersheds in order to facilitate the most closely defined evaluation of existing natural resources that was feasible. The NCNRR watershed for the project site is Grub Creek, with an area of 6,098 acres. The subsurface aquifer boundaries and contributing areas in the project region are not known, but the surface watersheds are a reasonable surrogate to use for the purposes of evaluation of regional project impacts, with consideration also given to the experience of local well-drilling contractors who have empirical knowledge of the effects that do or do not result from small-parcel domestic water supply wells.

The project would not result in any new diversion or use of water that does not already exist or occur. Water that is used for purposes of filling fire protection equipment is now and would continue to be supplied by Nevada Irrigation District (NID). Domestic water supply for the new fire station would be from a Class II commercial well to be installed on site (50 foot annular seal to prevent pollution, should any be present, from entering the well). It is normal for nearly all parcels of this size in the project region to obtain their domestic water supply from a well. Water supply is addressed in a letter from Peters' Drilling and Pump Service, which states that, based on regional experience and their experience having drilled water supply wells on neighboring parcels, the well can reasonably be expected to supply sufficient water for RRVFD use without resulting in any reduction in surrounding well yields (Appendices, item 4.1.4A). Specifically, the well on the adjoining parcel to the east produces 30 gallons per minute (gpm) and the one directly across Rough and Ready Highway produces 60 gpm. These far exceed the Nevada County requirement of 3 gpm in order to obtain a building permit. Given these very high well yields, the project's water use would not be expected to affect neighboring wells. Water quality from neighboring wells has been good, sometimes requiring filtration to remove iron.

Water Quality

Wastewater Disposal

Wastewater disposal would be via a standard septic leach system with a capacity of 750 gallons per day. Based on other similar sized fire departments in the county, this size of system was judged to be adequate for the needs of the Proposed Project (County estimate was 500-750 gallons so the proposed system will be 750 gallons/day). A Registered Professional Environmental Health Specialist from the Nevada County Environmental Health Department observed the soil testing

and analysis for the proposed septic location and determined that it meets the Nevada County On-site Sewage Disposal Ordinance and Regulation for the protection of groundwater and public safety (see Appendices, item 4.1.4B).

Stormwater Discharge During Construction

The National Pollutant Discharge Elimination System (NPDES) regulates discharges to jurisdictional waters of the U.S. pursuant to Section 402 of the Clean Water Act. In accordance with NPDES Phase II, the California State Water Resources Control Board, Division of Water Quality, has issued a new general permit (effective July 1, 2010) for storm water discharges associated with construction and land disturbance activities (water quality order no. 2009-0009-DWQ; NPDES no. CAS000002). Among other things, this permit requires construction projects that will disturb more than one acre of soil (including removal of pavement or structures) to file a notice of intent, prepare and implement a stormwater pollution prevention plan (SWPPP), and comply with all other conditions of the general permit.

The project would entail a surface disturbance of approximately 1.1 acres and would therefore comply with the NOI and general permit requirements.

Stormwater Discharge After Construction

The proposed project site includes impervious areas (existing structures and some pavement), nearly impervious areas (highly compacted bare or partially gravel-covered soils), and areas of intact weedy or woodland vegetation that sheet flow primarily into the Rough and Ready Highway right-of-way and into the existing roadside drainage system (excavated ditch). This storm water is not currently routed through any water quality treatment facilities and likely contains significant amounts of fine sediment at times. The proposed design includes water quality Best Management Practices (BMPs) that include water quality treatment drop inlet inserts (see Appendices, item 4.1.4C) and a hydrodynamic separation manhole. These devices will intercept and remove sediment, trash, debris and free oil and grease. Independent field tests on the inlet inserts proposed indicate approximately an 85% to 90% TSS removal when sized appropriately for the shed area and flows and properly maintained. Test results for the hydrodynamic separator have shown 100% removal of floatables and 80% TSS removal. The units require periodic maintenance and if consistently provided will continue to provide water quality treatment for the project stormwater runoff.

The majority of the stormwater runoff from the existing developed portion of the project site flows toward the Rough and Ready Highway and continues along the excavated roadside ditch to an existing cross culvert near the private drive. This 18" storm drain discharges into an open roadside ditch on the south side of Rough and Ready Highway, then into another section of 18" storm drain that flows southeasterly into a vegetated swale that runs about 120 lineal feet into a constructed pond. This pond overflows through a rocky and densely vegetated slope into a local creek. The proposed improvements will discharge into the same storm drain.

On a recent site visit, after the end of an above-average precipitation year, there were no indications of any existing erosion occurring in this system. The open ditches and vegetated swales include both native grasses and woody vegetation that appears to keep these areas stabilized. There were no indications of current erosion in the channel or from flows discharging from the pond to the downstream stream. There were no indications of other erosion in the area having occurred from overland release during higher than design peak flows. Residents in the area of this

discharge and the pond stated they have not had problems with erosion or flooding. A preliminary estimate of proposed flow through the steepest and narrowest portion of the downstream conveyance system, based on the maximum flow through the 18" pipe assuming inlet control, is that estimated velocities are less than 7 feet per second (fps) in the swale. It would appear that the heavier vegetation protects the swale from significant erosion. This swale widens and flattens as it approaches the pond and as a result the velocities also decrease accordingly. If some erosion does occur it would be in the upper steeper narrower portions of the swale near the 18" storm drain discharge. Adding rock to dissipate energy and armor this upper portion of the swale should mitigate this if needed.

Downstream of the inlet to the lower 18" storm drain is an existing building. From observation, it appears that areas around the side of the building are lower in elevation, providing an overland release if the system were to become blocked or if flows larger than the pipe occur. The overland release area is mostly vegetated and not a concentrated channel but provides for more of a wide spread flow around the building. It is a wider area with flatter slopes and no areas of erosion or concentrated flows were observed. From what was observed in the field, it appears to be stabilized.

The area of the proposed project is about 6 percent of the overall watershed area that flows into the storm drain on the north side at Rough and Ready Highway. It is even less of the total watershed that flows into the pond. The increase of impervious area is from 0.3± acre to 0.75± acre. With respect to the local watershed the proposed impervious area is less than 5 percent of the overall area and even less for the total watershed area that flows into the off-site pond.

The estimated capacity of the lower conveyance (culvert) is 10 cubic feet per second (cfs), based on the size of the inlet. The estimated 10-year peak flow from the overall project watershed is 8.5 cfs, and from the project site, approximately 2.2 cfs. The 10-year peak flow into this lower culvert includes flows from watersheds outside the overall project watershed area. Peak flows that exceed the capacity of the culvert would flow overland through existing well vegetated overland release areas toward the pond and not impact existing structures.

Alternative 1: No Action

No change in impacts on water resources or quality would be expected to result from the No Action Alternative.

Alternative 2: Proposed Project

The Proposed Project would not have any significant short- or long-term impacts on water supply (quantity) due to the installation and operation of its domestic water supply well. The Proposed Project would not have any significant impact on groundwater quality related to the installation or operation of its wastewater disposal system.

The project would result in less than significant short- or long-term impacts on water resources from the standpoint of quantity. The total increase in impervious area is proposed to be approximately 0.45 acre. This is only 0.0074 percent of the Grub Creek watershed, and is therefore would have no significant potential effect on aquifer recharge. According to the opinion of an experienced local well driller who has drilled wells on neighboring properties and is knowledgeable about the quality and quantity of yield from those wells, the small amount of

domestic water supply pumping from the project's well would not significantly adversely affect the water supply wells of neighboring parcels (Appendices, item 4.1.4A).

The Proposed Project has a goal of becoming the second LEED-certified commercial building in western Nevada County, and for this reason specific water quality protection measures (discussed above) are included in the project design. Since stormwater runoff from the site is currently untreated, the proposed project would result in a moderate long-term beneficial impact in the form of improvement in the quality of runoff from the site, even though there would be an increase in impervious area.

Based upon the field study of the area and flow analysis as described above, the project civil engineer determined that the Proposed Project would not have any significant long-term operational impacts in the form of erosion or flooding in, or related to, the existing storm drain system.

4.1.5 WETLANDS

EO 11990 mandates that actions taken by Federal agencies minimize direct and indirect impacts on wetlands and establishes the goal of no net loss of wetland area or values.

The project is located within a group of about ten USGS quadrangles in the western Nevada County region for which National Wetlands Inventory mapping data is not available in digital form. However, a scan of the paper NWI map for the Rough and Ready quadrangle does not show any wetlands at the project site (see Appendices, item 4.1.5A). Notably, many of the wetland features shown in the NWI map in the project vicinity are constructed livestock ponds that are supported by irrigation, many of which are not subject to regulatory provisions of the Clean Water Act.

During the biological field survey, a very small area of wetland vegetation that is supported by artificial hydrology was discovered, which drains into a narrow, excavated ditch beside an existing driveway. No other portion of the project site meets any of the three mandatory wetland criteria (hydrophytic vegetation, wetland hydrology, or hydric soils). The water in question is the overflow from a water storage tank uphill and off site, which is supplied exclusively with pumped and/or diverted irrigation water and flows to and through the project site intermittently. A letter describing the flow circumstances is included in the Appendices (item 4.1.5B). In accordance with the U.S. Army Corps of Engineers Sacramento District regulatory branch memorandum 2007-01 (Appendices, item 4.1.5C) and the overarching regulatory documentation which it cites (specifically, the preamble to 33 CFR 328.3 and definition of waters of the U.S.), areas which were not wetlands prior to application of irrigation (including inadvertent irrigation), and/or cease to meet one or more of the three mandatory wetland criteria when the source of irrigation water is discontinued, are not regulated wetlands.

This is precisely the case for the small patch of hydrophytic vegetation within the present project site, and the drainage ditch from it to the edge of the site. Empirically, it was demonstrated that the water flow quickly ceases when the storage tank overflow to the site is discontinued, which means that the area does not meet the wetland hydrology criterion under normal circumstances, and it is therefore not a wetland or other water of the U.S. for the purposes of Clean Water Act jurisdiction or other federal policy (such as EO 11990). This being the case, there are no wetlands or other waters of the U.S. within the project site.

Alternative 1: No Action

There is no impact on wetlands from the No Action Alternative.

Alternative 2: Proposed Project

As explained above, there are no wetlands within the project site, nor are any wetlands present immediately off site within a distance that would reasonably be expected to experience indirect effects from the project. Therefore the Proposed Project would have no impact on wetlands and is in compliance with EO 11990 and the Clean Water Act Section 404 (see Section 4.1.4 if this EA for discussion of compliance with other sections pertaining to water quality).

4.1.6 FLOODPLAINS

EO 11988, pertaining to floodplain management, requires federal actions to be undertaken so as to minimize construction within, or other modification of, floodplains. In the event that a project is to be sited within a 100-year floodplain, practicable alternatives must be considered that avoid development within the floodplain wherever possible and/or, if such development cannot be avoided, to reduce adverse impacts from it to the minimum level that is feasible.

Neither the existing fire station nor the site of the Proposed Project are located within the 100-year floodplain according to the FEMA Floodplain Insurance Rate Map (Nevada County, California, community panel number 060210 0600 B; January 19, 1983; Appendices, item 4.1.6). The entire panel is Zone X (unshaded: above the 500-year floodplain).

Alternative 1: No Action

There is no impact because the existing fire station is outside the 100-year (and 500-year) floodplain.

Alternative 2: Proposed Project

There is no impact because the new fire station site is outside the 100-year (and 500-year) floodplain. Therefore, the Proposed Project is in compliance with EO 11988.

4.1.7 BIOLOGICAL RESOURCES

The project site is a previously developed parcel in the town of Rough and Ready and an adjoining parcel that is partially developed. The great majority of the site is covered by urbanized impervious or mostly impervious cover (structures, parking areas), with several ornamental trees of native and non-native species (redwood, mulberry, oak). A portion of the site is native vegetation including grassland and oak woodland. An aerial photograph of the setting is included in the Appendices (item 4.1.7A). A field study of the site's biological resources was carried out in September 2009, and a detailed description of the results is provided in Juncosa (2010).

Section 7 of the federal Endangered Species Act requires federal agencies' actions to avoid impacts on listed threatened or endangered species, and candidates for listing, and to minimize any unavoidable impacts; specifically, in the event that the agency determines that an action may affect a listed or candidate species, it must consult with the U.S. Fish and Wildlife about the nature of the effect and on available means to avoid jeopardy to the species. To this end, a list of the

federally listed and candidate species that occur in the project region was obtained from the U.S. Fish and Wildlife Service internet site and is included in the Appendices (item 4.1.7B). In addition, the California Natural Diversity Data Base (CNDDB) was consulted for records of occurrences of other special-status species in the immediate project region (Appendices, item 4.1.7C). Finally, for completeness, the site's habitats were evaluated for suitability for any additional sensitive species that are known from the area but were not found on either the federal list or CNDDB printout.

Following review of the project's biological inventory report, FEMA carried out consultation with USFWS in the form of a letter dated April 2, 2010, which stated FEMA's finding that the project will not affect any federally listed threatened, endangered, or candidate species or critical habitat therefor (Appendices, item 4.1.7D). Having declined to respond within the 30-day period specified in the letter, USFWS is deemed to concur with the findings stated in FEMA's consultation letter.

No habitat that is potentially suitable for any listed endangered or threatened species, or for any candidates for such listing, is found on the site (Juncosa, 2009). Likewise, no critical habitat for any listed species is present. In particular, the erratic nature of the supply of irrigation water (discussed above in Section 4.1.5, Wetlands) makes the small area of hydrophytic vegetation and the roadside drainage ditch unsuitable for California red-legged frog, which requires near-permanent surface water (or at a minimum, water that is reliably present throughout a long period of time every year, with only brief periods of absence of surface flow).

Finally, no game species (e.g., mule deer or waterfowl), commercially important fisheries, or shellfish resources are present on the site. Common rodents such as gophers, voles, and mice are probably present. Habitat that is potentially suitable for nesting use by migratory birds is present in the form of trees and areas of natural (not disturbed weedy) vegetation. Take of such species, including removal or disturbance of occupied nests, is prohibited by the Migratory Bird Treaty Act.

Alternative 1: No Action

There is no impact on listed species or other biological resources from the No Action Alternative. The risk of wildlife mortality and noise disturbance along Rough and Ready Road would remain at the present level.

Alternative 2: Proposed Project

There is no significant effect on listed species or other general biological resources that would be expected to result from the Proposed Project. There is some minor potential beneficial impact resulting from reduction of noise disturbance along Rough and Ready Road (which passes through better wildlife habitat than is present at the project site in the center of Rough and Ready) and from probable reduction in the risk of animal strikes by employee or emergency vehicle traffic along Rough and Ready Road.

The majority of the project footprint and construction disturbance area would occur within the area of presently degraded ruderal vegetation and urbanized land (paved surfaces, unpaved but highly compacted soil, and existing structure). These areas support few native plants and almost no wildlife use. Four trees would be removed, none of them landmark-size native hardwoods. A small amount of native and/or non-native grassland or oak woodland or savanna would be removed to install the septic leach field and revegetated with native species afterward. Taken together, these impacts on existing native and non-native vegetation and upon the few common

wildlife species that are likely to be present (specifically, rodents) are judge to be less than significant.

Prevention of impacts on nesting migratory birds and compliance with the Migratory Bird Treaty Act would be ensured by the mitigation measure identified below. The analysis in the biological assessment report (Juncosa, 2010) determined that the Proposed Project would have no effect on any listed species or critical habitat and is therefore in compliance with the federal Endangered Species Act.

Mitigation Measure

4.1.7 The RRVFD shall ensure that no take of migratory birds occurs during project construction, and thereby comply with the Migratory Bird Treaty Act, either by scheduling the construction disturbance that affects potential nesting habitat for some time between August 16 through January 31, which is outside the nesting season for any migratory birds that nest in the project region and in habitats such as those that occur on site, or by conducting pre-construction surveys and implementing contingent mitigation actions. Potential nesting habitat effects include both tree removal and grading of any soil surfaces that presently support potential habitat for ground-nesting migratory birds. (Compacted soils that support only sparse, weedy, non-native vegetation do not provide potential nesting habitat.) In the event that construction disturbance of nesting habitat is scheduled between February 1 and August 15, surveys for nesting raptors, owls, and/or migratory birds shall be conducted by a qualified biologist no more than 21 days nor less than 7 days prior to construction. The nature of the survey activity depends upon the time period and therefore the biology of the species that are potentially present. Results of the survey shall be documented in writing and submitted to Nevada County staff prior to initiation of construction.

If nesting birds are discovered, no construction equipment shall be operated within a non-disturbance setback distance that is a minimum of 50 feet, or further as appropriate to the biology of the species that is found to be nesting, until nestlings have fledged. Fledging of young shall be determined by revisit to the site by the biologist at intervals until the nest is determined no longer to be occupied. Following documentation of this condition in writing, submitted to Nevada County staff, construction (including nest removal) may proceed without restriction.

4.2 Human, Historic, and Socioeconomic Environment

4.2.1 LAND USE

Most of the Rough and Ready project region is land zoned for agriculture (various parcel sizes) that in fact is primarily used as rural residential land, with limited grazing or other agricultural land use. Some areas are zoned for open space (no development).

Zoning is shown in Figure 1. The existing RRVFD fire station is located on a parcel that is zoned P (Public) by the Nevada County General Plan, which is an isolated parcel of this zoning category surrounded entirely by land zoned as AG-5 (Rural with a five acre minimum parcel size), which is in fact mostly functionally low-density rural residential land use (see Figure 1). The proposed new station site is on a parcel that is zoned C-1 (Neighborhood Commercial), roughly in the middle of the functional town of Rough and Ready (it is not incorporated).

The General Plan defines these land uses as follows (letter codes are as shown in Figure 1; codes differ from those used in the General Plan text, but the designations do not):

AG-5 One of several Rural zoning designations. These are intended to provide for development of compatible uses within a rural setting. Such uses may include rural residential at a maximum density of five acres per dwelling unit (for AG-5; other densities specified for other subcategories of rural zoning), agricultural operations and supporting agricultural production, natural resource production and management, and low-intensity recreation.

P Public is intended to provide for land in public or quasi-public ownership, including cemeteries, schools, and other public and quasi-public buildings and uses in locations which are necessary to provide services to community and rural regions.

C-1 Neighborhood commercial is intended to provide for local needs of nearby neighborhoods within community regions or as part of the development of rural centers. This designation should have not more than 10 acres of land in any single location and development should be grouped as a clustered and contiguous center to preclude strip development. Locations of this designation shall provide for convenient, controlled access to arterial or collector roads.

Operation of a fire department operation is allowable in all of these zoning categories, although it is apparent from the General Plan text that location of a fire station is much more appropriate in an area zoned Neighborhood Commercial than in one zoned Public, especially if the latter is a single parcel surrounded by a large area of contrasting land use. No zoning change is proposed by the applicant, or by any other entity in connection with the Proposed Project. An unoccupied commercial building already exists within the proposed new station site, therefore there will not be a land use change either in terms of County regulation or in fact.

Alternative 1: No Action

There is no impact on land use from the No Action Alternative. The present contrasting land use (fire station located in an otherwise low-density rural area) would continue. Impacts on surrounding residents (specifically noise disturbance when emergency responses occur) would continue.

Alternative 2: Proposed Project

The Proposed Project would result in an improvement of the present discordant land-use situation. Although there would be no change in zoning or actual use of the project site, the use of the proposed site for a fire station is more compatible with the surrounding zoning and actual land use of central Rough and Ready. Additional impact considerations with respect to noise are discussed in Section 4.2.5.

4.2.2 HISTORIC PROPERTIES

The National Historic Preservation Act, Section 106, requires that the potential effects of federal undertakings on historic properties be considered prior to expenditure of federal funds (36 CFR 800.1(c)). The historic property analysis that was carried out for the Proposed Project included consideration of the potential for unnecessary harm to historic properties, including prehistoric or historic objects, sites, buildings, structures, or districts that are listed or eligible for listing in the National Register of Historic Places (NRHP).

Methods included a records search of the North Central Information Center, California Historical Resources Information System; sacred lands file search by the Native American Heritage Commission; contacts with Native Americans listed by the Commission to solicit information on the location of Native American cultural resources; archival research; and an archaeological field inspection of the Area of Potential Effect (APE). The results are documented in Windmiller (2009). Consultation with State Historic Preservation Office (SHPO) was undertaken by Mr. Windmiller and by FEMA (Appendices, items 4.2.1A and 4.2.1B), and a concurrence letter was received from SHPO (Appendices, item 4.2.1C).

The APE of the Proposed Project is located within the boundaries of historic Rough and Ready, California. The townsite of Rough and Ready is listed as California Historical Landmark No. 294. The description of this landmark states that "…as a result of disastrous fires, only a few structures remain today that were built in the 1850s." The townsite has never been evaluated for listing on the NRHP, and the direction from the SHPO was for the immediate viewshed surrounding the APE to be evaluated. This viewshed consists of a modern trailer park, small chapel and sculpture studio, several modern residences, a country store and post office, all of which appear to be post-World War II construction. The only existing building located within the area of direct impact (project construction footprint) is an abandoned gas station built in 1968 with a façade designed to look generally like a historic building.

On a small parcel that separates the two project parcels stands a building that is the reconstruction of the Fippins Blacksmith Shop, which was originally built in the 1850s. The current reconstructed building is clad in mixed wood siding varying from horizontal boards to vertical board and batten, to plain vertical boards of varying widths and ages, attached with a mixture of wire nails and drywall screws (thus, modern fasteners). The boards include at least some which are unquestionably of recent manufacture. The consulting archaeologist determined that it was obvious that the reconstruction work was not conducted in accordance with the Standards and Guidelines for Rehabilitating Historic Structures. However, the building would remain in place under the Proposed Project.

No sites or artifacts of cultural significance to Native Americans were identified in the course of the study and consultation.

Alternative 1: No Action

The No Action alternative would have no impact on historic properties or upon sites or artifacts that are of cultural significance to Native Americans.

Alternative 2: Proposed Project

Considering that no historic structures would be removed or altered for the project, and that the viewshed is of primarily modern structures including a modern, non-conforming reconstruction of the Fippins Blacksmith Shop, the Proposed Project would not have an adverse short-term or long-term impact on historic properties (See Appendices: letter from State Historic Preservation Office dated March 5, 2010; item 4.2.1C). However, there is always the potential that artifacts or remains may be uncovered in the course of any ground-disturbing activity during construction. Depending upon the nature of the discovery, such an impact would be potentially significant. It would be avoided or reduced to a less-than-significant level by the following mitigation measure.

Mitigation Measure

4.2.2 All construction plans shall advise contractors and construction personnel involved in any form of ground disturbance of the possibility of encountering subsurface cultural resources. If such resources are encountered or suspected, work shall be halted immediately and the Planning Department contacted. A professional archaeologist shall be consulted to access any discoveries and develop appropriate management recommendations for archaeological resource treatment. If human bone is encountered, the Nevada County Coroner and the Native American Heritage Commission shall be contacted and, if Native American resources are involved, Native American organizations and individuals recognized by the County shall be notified and consulted about any plans for treatment.

4.2.3 SOCIOECONOMIC RESOURCES

EO 12898 (Environmental Justice) requires federal agencies that are contemplating a project action to identify and either avoid or mitigate any adverse health or other environmental impacts that disproportionately affect minority and/or low-income populations as a result of the action. The Order also requires that public notifications be concise, understandable, and readily accessible.

The project area does not include a concentrated enough population to be summarized in U.S. Census Bureau data tables; Rough and Ready is not represented in these tables either as a political jurisdiction (it is not an incorporated Town) or as a census-defined place (CDP). Since there is no concentration of population at all, it follows that there is not a concentration of minority or low-income residents that could be disproportionately affected by the project's human or environmental consequences.

Moreover, the project's benefits, namely improved fire protection and other emergency response capability, would be available to all categories of regional residents equally.

Alternative 1: No Action

There would be no impacts related to environmental justice from the No Action Alternative.

Alternative 2: Proposed Project

There is no concentration of minority and/or low-income population that would be disproportionately affected by any adverse impacts of the project, and the project's benefits would accrue to all regional residents equally. Therefore, the Proposed Project is in compliance with EO 12898.

4.2.4 TRAFFIC

The site is on Rough and Ready Highway about 2.7-3.0 miles west of the outskirts of Grass Valley and 2.5 miles east of the highway's end at state Highway 20. The surrounding region is moderate to sparse density rural residential development with some agricultural (grazing) lands. There are no dense subdivisions in the immediate vicinity that result in significant peak hour traffic flows.

The greatest nearby population densities, which themselves are not particularly high density, are in Grass Valley and in the Lake Wildwood community. However nearly all of the traffic from those two areas utilize other direct or higher-speed roads for nearly all travel. In the case of Grass Valley, various short in-town street connections lead quickly to the limited access four-lane Highway 49, and the Lake Wildwood developments are served by a short two-lane road connection (Pleasant Valley Road) to four-lane Highway 20.

Thus, nearly all traffic on Rough and Ready highway is local and is somewhat dispersed throughout the day (that is, there are no "rush hour" time periods during which traffic becomes congested and experiences delays or lowered level of service (LOS) category.

Records show that the RRVFD responds to an average of 13 calls per month (seven rescue and six fire). For a rescue call, typically three vehicles respond; to a fire, about four vehicles. This equates to about 45 roundtrips per month by emergency vehicles. For training and normal district operations, there are an estimated 25 additional roundtrips per month by emergency vehicles. In addition to the emergency vehicle trips, the average of 13 calls per month with an estimated average of about 10 volunteers responding to the station per call also results in about 130 roundtrips into the station for firefighters who then respond to calls in the emergency vehicles. There are an additional estimated 100 roundtrips per month in personal vehicles for training and non-emergency-response duties.

In summary, there are about 400 one-way vehicle trips to and from the existing fire station; as explained in Section 1 (Introduction), this number will not change under the Proposed Project.

Because the proposed new station is located centrally on Rough and Ready Highway, the great majority of these vehicle trips already pass right by the proposed project site under existing conditions. However, under the Proposed Project, the 400 trips noted above would result in an average of about 13 vehicles turning in or out of the station per day. Under a peak circumstance (namely, when an emergency call occurs), there would be about ten vehicles turning in, and four responding vehicles turning out, all within a period of minutes.

A private road (unpaved at present) and easement crosses the project site. The project design will result in the realignment of the road by a maximum of about 30 feet, with the new segment to be paved. The easement would also be relocated to follow the new road alignment.

Alternative 1: No Action

There would be no impact on traffic from the No Action Alternative.

Alternative 2: Proposed Project

During construction, the Proposed Project would result in approximately 20 vehicle trips to and from the site (one round trip counting as two vehicle trips) daily, Monday through Friday for a period of ten months, and a lesser number of trips for a period of two months. During operations, the Proposed Project would result in approximately eight trips per day including staff arrivals and departures and emergency calls.

Neither during construction nor operations would it be likely that the LOS on Rough and Ready Highway would change to a lower category (e.g., from A to B), therefore the Proposed Project would not have any significant short- or long-term impact on traffic on Rough and Ready Highway or the proximal intersections. Project construction is not expected to necessitate any lane closures or other similar types of traffic delays, and the small number of construction-related vehicles that would be turning in and out of the site would have insignificant effects on traffic on Rough and Ready Highway.

4.2.5 NOISE

As explained above in Section 4.2.3, the existing fire station site is in the middle of a sparsely settled rural area, where the only non-agricultural/residential parcel is the fire station site itself (see also Figure 1). Although the noise of emergency sirens is exempted from County regulations that limit noise within each land use category (to 60 dB Leq in the case of commercial zoning), the surrounding public is nevertheless affected by the noise resulting from the existing condition. A great majority (estimated to be 75 percent) of the emergency calls received by the Department require response to sites that are accessed by driving all the way down Rough and Ready Road to Rough and Ready Highway, and thence to the emergency site, almost always passing directly by the proposed future site of the fire station.

There are no unique or sensitive noise receptors such as schools, libraries, hospitals, churches, concert halls, nursing homes, or cemeteries either near the present fire station location or in the immediate vicinity of the Proposed Project site.

The Proposed Project site is in the middle of Rough and Ready, with the closest residences located within 100-200 feet.

Alternative 1: No Action

The No Action Alternative would result in a continuation of the present noise impacts on the surrounding rural community and the wildlife that is found within it.

Alternative 2: Proposed Project

The Proposed Project would result in a significant long-term reduction of noise impacts on the rural area in which the present station is located. Because Rough and Ready Highway is the main collector road through the center of the RRVFD service area, the majority of emergency responses would continue to pass by the proposed project site regardless of whether the fire department remains at the present location or is moved to the proposed site. However, for the remaining

portion of the fire department's calls, there would be a minor (less-than-significant) long-term increase in noise impacts in the new station location, which is zoned for commercial uses and has a higher permissible noise threshold than do agricultural or residential land uses.

There is a potential for significant short-term noise impacts on nearby residents during construction, which would be reduced to a less-than-significant level by the following mitigation measures.

Mitigation Measures

4.2.5A Construction activities shall be limited to the hours of 7:30 AM to 7:30 PM, Monday through Friday.

4.2.5B Fixed construction equipment (compressors and generators) shall be located as far as feasibly possible from residential properties along the northern and northwestern sides of the site. All noise-generating tools shall be shrouded or shielded, and all intake and exhaust ports on power construction equipment shall be muffled or shielded.

4.2.6 PUBLIC SERVICES AND UTILITIES

The water supply for fire protection vehicles will be supplied by NID, as is presently the case. Domestic water supply for the new fire station would be from a well to be installed on site. Wastewater disposal would be via a standard septic leach system. Water supply and quality issues are discussed in more detail in Section 4.1.4 of this EA. Electrical power for the new fire station is proposed to be supplied by the existing utility lines. The existing main electrical supply lines that pass by the site are sufficient to support the project needs without modification (see letter confirming adequacy of off-site utilities in Appendices, item 4.2.4), but the smaller supply lines to the site would be upsized to accommodate the station's needs. Existing electrical service in the area is overhead, and some power lines and poles will be slightly relocated to accommodate the project footprint.

There is no natural gas line at the project site; the project will use propane, as do other developed parcels.

Solid waste would be generated to demolish the existing commercial building and pavement at the Proposed Project site, before the new fire station could be built. The majority of these materials would be delivered to Hansen Bros. Enterprises for recycling; the remainder would be disposed of by delivery to the Nevada County McCourtney Road transfer station for export (there is no landfill within the County). The amounts are as follows (see letter from Bruce Ivy Construction; Appendices, item 4.2.6):

Existing building (wood and mixed construction materials)	90 tons to landfill
Building foundation (concrete and rebar)	45 tons to be recycled
Driveway (concrete)	37 tons to be recycled
Driveway (asphalt)	78 tons to be recycled

Waste from demolition such as that which will be required for the project is exported from the transfer station to Recology Ostrom Road, a landfill in Wheatland, Yuba County, California. This landfill began operation in 1995 and has an expected closure date of 2066 and a total design

capacity of over 41 million cubic yards. In terms of rate of acceptance, the Ostrom Road landfill can handle up to 3,000 tons/day. The 90 tons (60 cubic yards) from R&R would constitute approximately 0.000146 percent of the total capacity of the landfill and, in the highly unlikely event that the entirety of the project demolition waste were to be delivered in one day, it would constitute only 0.03 percent of the daily capacity of the landfill.

Alternative 1: No Action

There would be no impact on public service and utilities from the No Action Alternative.

Alternative 2: Proposed Project

There would be no significant impact on public services and utilities from the Proposed Project; existing utility mains are sufficient to support the project's operational needs without expansion. Thus, there is no connected off-site project such as replacement or extension of power lines. Temporary interruptions of utility service would be necessary when utility poles are relocated and when the larger new line (within the site) is connected, but this would be a less than significant short-term impact on the public that is served by the utility, and would not be a significant impact on the utility itself. Minor relocation of utility poles within the project site would have no significant short- or long-term impact on either the utility or the public it serves. The contribution that the project would make to the daily and lifetime capacity of the landfill which would receive the construction waste is insignificant (0.000146 and 0.03 percent, respectively).

4.2.7 PUBLIC HEALTH AND SAFETY

The primary public health and safety concern in the project vicinity is the danger of structure and especially wildland or wildland-urban interface fires. Rough and Ready Fire District is a rural area of the Sierra Nevada foothills, with rugged terrain and, in most areas, dense native vegetation that provides a concentration of highly flammable fuels. Under the windy and low-humidity weather conditions which prevail when fires occur in this part of California, rapid and effective emergency response is critical to minimizing the loss of property, jeopardy to public safety, and other adverse environmental effects from wildfire (see Section 2.3.1).

Under existing conditions, the speed of response of the RRVFD is constrained by the station location, and the present and future ability of the RRVFD to provide effective response is constrained by the difficulty of replacing equipment with modern vehicles, which do not fit in the existing station.

Alternative 1: No Action

Under the No Action Alternative, the ability of the RRVFD to provide fire protection and other emergency services would continue to be impaired by the location and inadequacy of the existing fire station.

Alternative 2: Proposed Project

Implementation of the Proposed Project would significantly improve the ability of the RRVFD to maintain and improve the protection of public health and safety that it is responsible to provide. There would ultimately be minor long-term improvement from the superior fuel efficiency and lower emissions that can reasonably be expected from replacement fire engines, which would not

be possible under the No Action Alternative. Other public health and safety benefits (due to improved air quality, no mold, and so on) would result for the public that visits the proposed facility and the firefighters and staff that work there.

4.3 Cumulative Impacts

Past and present actions within the project's APE include road and building construction, mining, logging, agriculture (grazing and crop or orchard production), and activities associated with all of the above such as land-clearing, burning of fossil and other fuels, usage of water, and disposal of waste. Reasonably foreseeable future actions were determined from the Nevada County General Plan and by consulting with Nevada County Planning Department staff (specifically, with Mr. Tod Herman, Senior Planner, by telephone).

The project was considered in this context. The grant Applicant's Proposed Project is the construction of an 8,176 sq ft fire station and relocation of an existing fire department operation to that new station from its present base of operations. The existing emergency response operations are not expected to increase or decrease their level of activity, nor add to the current fleet of five emergency vehicles. These operations are an existing condition and would neither increase nor decrease as a consequence of the project. Accordingly, no analysis of potential cumulative impacts of the ongoing RRVFD operations is warranted except to the extent that those might relate to the change of location. That is, the other actions (whether by private or public entities) that should be considered in the analysis of cumulative impacts would need to be relatively local in order to be relevant (at least within the RRVFD service area, and most particularly within the commercial center of Rough and Ready).

Mr. Herman stated that he was not aware of any currently proposed or reasonably foreseeable future project development projects in the RRVFD district. He also stated that he was not specifically aware of any local building permit applications or approvals in the immediate Rough and Ready area, although some probably exist or are likely to be submitted.

The other respect in which the project might have individually insignificant, but cumulatively significant impacts, relates to the construction itself. The Nevada County Department of Public Works capital improvement plan does not identify any highway improvement or maintenance projects anticipated to the implemented concurrently with the Proposed Project construction (that is, within the next year).

Alternative 1: No Action

There are no individually insignificant but cumulatively significant impacts that would reasonably be expected to result from the No Action Alternative.

Alternative 2: Proposed Project

Since there are no other development projects known or anticipated within the RRVFD service area, there are no impacts from the Proposed Project that are individually insignificant but which would reasonably be expected to result in one or more significant cumulative impacts within that area as a whole. Zoning is sufficiently low-density that the General Plan determined that the range of potential long-term development impacts (loss of habitat, traffic, and many others) are not projected to be significantly affected even at build-out.

With respect to short-term during-construction impacts, there are no other known or reasonably foreseeable actions that would have impacts which would be cumulatively significant when considered in addition to the project's short-term impacts.

4.4 Irretrievable Commitment of Resources

Alternative 1: No Action

There is no irretrievable commitment of resources that would result directly from the No Action Alternative, however, irretrievable losses of life or property could result from impaired fire protection services.

Alternative 2: Proposed Project

Under the Proposed Project, some building materials (asphalt, concrete, and others) would be required to construct the project, and these constitute a commitment of resources that is irretrievable to some degree. The amounts of these materials that would be used to construct the project is determined by building codes and standard engineering practice and cannot be feasibly reduced within the project objectives and financial constraints. As noted above in Section 4.2.6, building materials from the demolition of existing pavement and structures on the site would be recycled, which would reduce the impact of the project's irretrievable commitment of resources to the maximum extent that is practicable.

5 SUMMARY OF MITIGATION MEASURES

Air Quality

4.1.2A. The RRVFD shall utilize alternative to open burning of vegetation material on site unless all of these alternatives are deemed infeasible by the Air Pollution Control Officer. Such alternatives including chipping, shredding, grinding, use as firewood, and/or conversion to biomass fuel. An approval letter shall be obtained from NSAQMD indicating the means of disposal to be used.

4.1.2B. Prior to the issuance of the grading permit, if the project will need to disturb more than one acre by grading or vegetation removal, the RRVFD shall prepare a Dust Control Plan to be approved by NSAQMD. If required, this plan shall include the following measures to be shown on the grading plans and implemented throughout construction:

- All materials or surfaces that are excavated, stockpiles, or graded shall be sufficiently watered, treated, or covered so as to prevent fugitive dust from leaving the property boundaries. Watering should occur at least twice daily during dry weather, with complete coverage of all active disturbed areas.
- All unpaved areas, including unpaved roads, that experience construction-related equipment or vehicle traffic shall be watered or otherwise treated to prevent the generation of fugitive dust.
- All on-site vehicle traffic shall be limited to a maximum speed of 15 mph on unpaved surfaces.
- To control the generation of wind-blown dust, all land clearing, grading, earth moving, or excavation activities shall be suspended when winds exceed, or are expected to exceed, 20 mph.
- All soil materials transported off site shall be either sufficiently watered or securely covered to prevent loss of material, and shall have at least six inches of freeboard in the bed of the truck.
- As long as unprotected disturbed soil surfaces are exposed during the construction period, paved roads adjacent to the project shall be swept or washed at the end of each day, or more frequently, as necessary to remove accumulations of silt or mud which may have been generated from construction activities, in order to prevent the entrainment of fine soil particles into the air by passing vehicles.
- As soon as is reasonably possible, native vegetative ground cover shall be re-established on disturbed final soil surfaces by means of seeding and temporary irrigation as needed.

4.1.2C. The following additional measure will be implemented to ensure compliance with other requirement of NSAQMD and California Air Resources Board:

- Any equipment with a portable engine attached that has a brake horsepower ration of 50 or more that does not provide motive power to the equipment, shall have a permit from the NSAQMD, or the engine may instead have a Portable Equipment Registration Program registration issued by the Board. In addition to engines, any ancillary equipment that emits pollutants to the air exceeding two pounds per day shall also be registered.

Biological Resources

4.1.7 The RRVFD shall ensure that no take of migratory birds occurs during project construction, and thereby comply with the Migratory Bird Treaty Act, either by scheduling the construction disturbance that affects potential nesting habitat for some time between August 16 through January 31, which is outside the nesting season for any migratory birds that nest in the project region and in habitats such as those that occur on site, or by conducting pre-construction surveys and implementing contingent mitigation actions. Potential nesting habitat effects include both tree removal and grading of any soil surfaces that presently support potential habitat for ground-nesting migratory birds. (Compacted soils that support only sparse, weedy, non-native vegetation do not provide potential nesting habitat.) In the event that construction disturbance of nesting habitat is scheduled between February 1 and August 15, surveys for nesting raptors, owls, and/or migratory birds shall be conducted by a qualified biologist no more than 21 days nor less than 7 days prior to construction. The nature of the survey activity depends upon the time period and therefore the biology of the species that are potentially present. Results of the survey shall be documented in writing and submitted to Nevada County staff prior to initiation of construction.

If nesting birds are discovered, no construction equipment shall be operated within a non-disturbance setback distance that is a minimum of 50 feet, or further as appropriate to the biology of the species that is found to be nesting, until nestlings have fledged. Fledging of young shall be determined by revisit to the site by the biologist at intervals until the nest is determined no longer to be occupied. Following documentation of this condition in writing, submitted to Nevada County staff, construction (including nest removal) may proceed without restriction.

Historic Properties

4.2.2 All construction plans shall advise contractors and construction personnel involved in any form of ground disturbance of the possibility of encountering subsurface cultural resources. If such resources are encountered or suspected, work shall be halted immediately and the Planning Department contacted. A professional archaeologist shall be consulted to access any discoveries and develop appropriate management recommendations for archaeological resource treatment. If human bone is encountered, the Nevada County Coroner and the Native American Heritage Commission shall be contacted and, if Native American resources are involved, Native Americal organizations and individuals recognized by the County shall be notified and consulted about any plans for treatment.

Noise

4.2.5A Construction activities shall be limited to the hours of 7:30 AM to 7:30 PM, Monday through Friday.

4.2.5B Fixed construction equipment (compressors and generators) shall be located as far as feasibly possible from residential properties along the northern and northwestern sides of the site. All noise-generating tools shall be shrouded or shielded, and all intake and exhaust ports on power construction equipment shall be muffled or shielded.

6 REFERENCES CITED

Brittan, L. A. 1975. Soil Survey of Nevada County Area, California. USDA Soil Conservation Service and Forest Service in cooperation with University of California Agricultural Experiment Station.

Holdrege & Kull, Inc. 2009. Geotechnical Engineering Report for Rough and Ready Fire Station. Report prepared for Bruce Ivy Construction, August 2009.

Juncosa, A. 2010. Biological Inventory and Assessment Report for Rough and Ready Fire Station. Report prepared for Rough and Ready Volunteer Fire Department, June 2010, incorporating and superseding the 2009 biological inventory prepared according to Nevada County guidelines.

National Fire Protection Association (NFPA). 2010. NFPA 1720: Standard for the Organization and Deployment of Fire Suppression Operations, Emergency Medical Operations, and Special Operation to the Public by Volunteer Fire Departments, 2010 Edition.

Nevada County. 2002. Nevada County Natural Resources Report. Report prepared and published by Nevada County Planning Department.

Windmiller, R. 2009. Rough and Ready Fire Department Construction Project Cultural Resources Inventory and Evaluation. Report prepared for Rough and Ready Volunteer Fire Department, September 2009.

7 AGENCY CONSULTATION AND LIST OF PREPARERS

7.1.1 AGENCY CONSULTATION

Consultation letters and responses are included in the Appendices. Telephone consultations are included in this list but not represented by written items in the Appendices.

U.S. Fish and Wildlife Service (species list consultation undertaken via USFWS web site)

U.S. Army Corps of Engineers (telephone/e-mail consultation with Erin Hess)

California State Historic Preservation Office (see Appendices for consultation letters from Ric Windmiller and FEMA, and SHPO response to the latter)

Northern Sierra Air Quality Management District (telephone consultation with Sam Longmire)

Nevada County Planning Department (telephone consultation with Tod Herman)

7.1.2 LIST OF PREPARERS

Donna M. Meyer, Deputy Environmental and Historic Preservation Officer, U.S. Department of Homeland Security - FEMA

Adrian Juncosa, Ph.D., President, EcoSynthesis Scientific & Regulatory Services, Inc.,

Ric Windmiller, R.P.A., Consulting Archaeologist

Ron Wood, Project Engineer, RFE Engineering, Inc.

Bruce Ivy, President, Bruce Ivy Construction, Inc.

Don Gannon, Chief, Rough and Ready Fire Department

Bob Vaughn, Assistant Chief, Rough and Ready Fire Department

8 APPENDICES

This section of the EA includes supporting documentation in the form of many letters of consultation with agency staff and experts in various technical areas, species lists, and maps and aerial imagery. Each Appendix is identified in the list below by the section number in the EA in which the item is first mentioned, and appear in this Appendices section in the order that they appear in the list. Several larger technical reports that are cited in the EA text by author and date (geotechnical report, historic properties, biological assessment) accompany this EA, but are provided as separate pdf files.

Site maps and photographs are included in the Windmiller (2009) report which accompanies this EA. A copy of a letter providing additional information developed after completion of that report is included here (item 4.2.1A).

Item	Description
2.2	Letter from County building inspector, July 29, 2009
3.2	Aerial map from EHP submittal, showing layout of project on aerial image
3.3.2	Letter from Network Real Estate
4.1.1A	Soil map and report from Web Soil Survey (cover sheet and non-site-related text omitted)
4.1.1B	Letter from Jason Jackson, NRCS, January 25, 2010, and Form AD-1006
4.1.1C	Final letter, underground storage tank closure permit
4.1.2	Copy of CEQA comment letter from Northern Sierra Air Quality Management District
4.1.4A	Letter from Peters' Drilling and Pump Service, May 10, 2010, discussing water supply well
4.1.4B	Nevada County Environmental Health Department, letter of May 13, 2010 pertaining to wastewater disposal system.
4.1.4C	Description of operational stormwater BMP
4.1.5A	Portion of the NWI map (Rough and Ready quadrangle) including the project site.
4.1.5B	Memo from Bruce Ivy about off-site tank overflow and leaking NID ditch
4.1.5C	U.S. Army Corps of Engineers, Sacramento District regulatory branch memorandum no. 2007-01
4.1.6	FEMA Flood Insurance Rate Map for project area
4.1.7A	Aerial photograph of site
4.1.7B	Copy of plant community map from biological inventory/assessment report
4.1.7C	USFWS species lists for Rough and Ready and three adjoining or nearby quadrangles (Grass Valley, French Corral, and Nevada City)
4.1.7D	California Natural Diversity Data Base printout
4.1.7E	FEMA letter to USFWS (no-effect determination)

4.2.1A Windmiller letter providing follow-up to historic properties report (Windmiller, 2009)

4.2.1B FEMA letter to SHPO

4.2.1C SHPO concurrence letter

4.2.4A Letter from Pacific Gas and Electric confirming adequacy of utility lines

4.2.4B Estimate of solid waste recycling and disposal from demolition on site

COUNTY OF NEVADA
COMMUNITY DEVELOPMENT AGENCY
BUILDING DEPARTMENT
950 MAIDU AVENUE, SUITE 170, NEVADA CITY, CA 95959-8617
(530) 265-1222 FAX (530) 265-8794 http://mynevadacounty.com

Steven L. DeCamp
Community Development Agency Director

Brian Washko
Chief Building Official

07/29/2009

Rough & Ready Fire Department
P.O. Box 10
Rough & Ready, CA 95975

Re: Inspection performed at:

Rough & Ready Fire Station
11042 Rough & Ready Road
Rough & Ready, CA 95975

To Whom It May Concern:

Records at the Building Department indicate a building permit for a firehouse addition was issued 11/08/1982 but there is no record of the original building permit. This permit has a final inspection date of 07/05/1984 but there is no record of any other inspections.

I observed the following deficiencies and items of concern on a walk-thru inspection on 07/29/09.

1. The restrooms are not ADA accessible.
2. The doors and areas of the building are not ADA accessible.
3. Accessible parking is not per the CBC.
4. It is evident that there have been multiple uninspected, unpermitted additions to the building which have created possible structural deficiencies throughout the building.
5. The main electric service to the building appears to be under sized.
6. There is evidence of roof leakage throughout the building.
7. There are multiple open penetrations to the exterior of the building.
8. There is exposed unsecured insulation throughout the building creating possible hazardous conditions.

If you have any questions regarding the above inspection findings, please contact me at (530) 265-1542 during business hours.

Sincerely,

Ron White
Senior Building Inspector

Applicant Name: Rough and Ready Fire Department
Grant Program: Assistance to Firefighters Grant, Fire Station Construction Grant
Grant Number: EMW-2009-FC-05324

The figure above depicts the new fire station to be built in Rough and Ready, California. There are four main project elements: the 8,167 sf fire station, the surrounding pavement (exact square footage not available), retaining wall, and the wastewater disposal leach field. The project site is not located in or near any 100-year floodplain, does not include any jurisdictional wetlands or other waters of the U.S., and does not provide any habitat suitable for federally listed species. Although the site is located within a state historic landmark (Rough and Ready townsite), the cultural resources inventory determined that the project would not have any significant impacts on historic or other cultural resources.

Network
Real Estate

5/6/2010

Rough and Ready Fire Dept.
C/O Don Gannon
11020 Rough and Ready Road
Rough and Ready, California
95975

Hello Don,

As per your request I have examined the zoning map for the downtown area of Rough and Ready to see how many of the parcels in this area are zoned C-1 (please see exihibit1, the color coded map). The findings of my examination are;

1. I determined that there are 16 properties in the downtown Rough and Ready area that are zoned or partially zoned C-1.

2. Out of those 16 parcels only three of them are unimproved (please see exhibits 2, 3, &4). I have color coded these parcels on the Nevada County Assessor's parcel maps. The parcels outlined in red are the improved parcels and the parcels in green are the unimproved parcels.

3. Of the three unimproved parcels, only two of them are technically bare land parcels. The parcel near the northeast corner of Rough and Ready Highway and Rough and Ready Road has a recently constructed large shop building on it and I have heard that the contractor owner will be building a personal residence on the property in the near future. The remaining two parcels are not adjoining and are only approx. a half acre each.

4. I did a search of the Nevada County MLS system and none of the 16 possible properties are currently offered for sale or lease.

5. Considering that the existing fire station is on approx. 1.29 acres, it does not appear that either of the unimproved parcels is large enough to meet your requirements even if they were available for purchase or lease.

Thank you for allowing me to be of service to you and please don't hesitate to contact me if I can be of any further service to you.

Jan Wilson

Jan Wilson

167 South Auburn Street, Grass Valley, CA 95945
Tel: 530.272.8885 Fax: 530.272.8703 e-Mail: sales@network-realestate.com

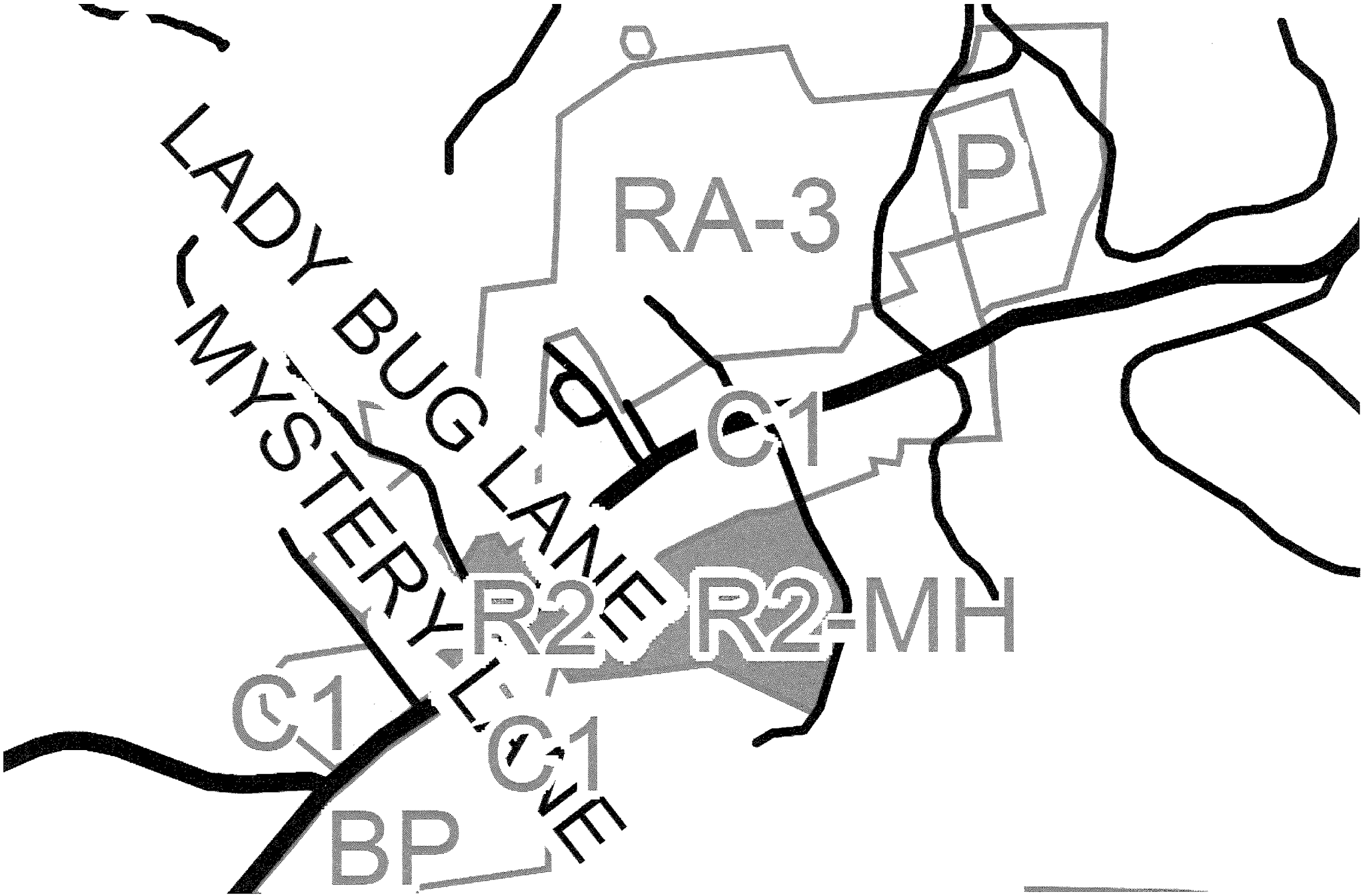
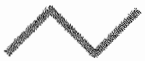


Exhibit 1

Legend


Highway/Freeway


Arterials


Collectors


Local Roads


County Boundary


Major Rivers


Lakes


Nevada City and
Grass Valley City Limits

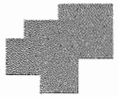
Nevada County Zoning

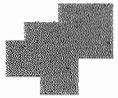

Agricultural Exclusive (AE)


General Agricultural (AG)


Business Park (BP)


Neighborhood Commercial (C1)


Community Commercial (C2)

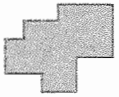

Highway Commercial (CH)


Forest (FR)


Interim Development Reserve (IDR)

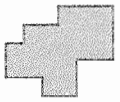

Light Industrial (M1)


Office & Professional (OP)


Open Space (OS)


Public (P)

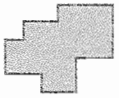

Grass Valley (GRASS VALLEY) and Nevada City (NEVADA CITY)

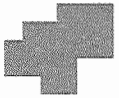

Single-Family Residential (R1)


Medium Density Residential (R2)


High Density Residential (R3)


Residential Agricultural (RA)


Recreation (REC)


Timberland Production Zone (TPZ)

Zoning Boundaries & Designations
Western Nevada County, CA

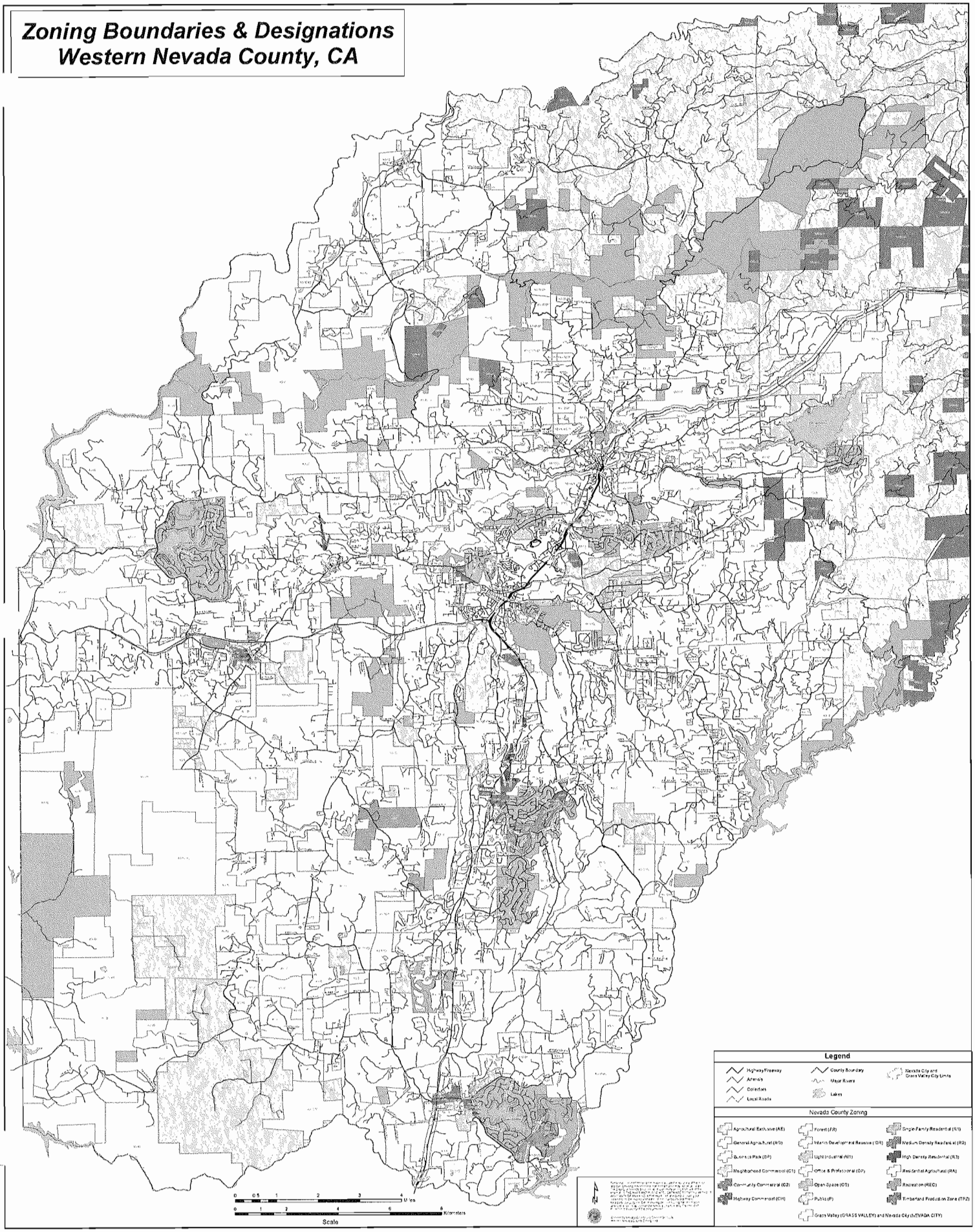
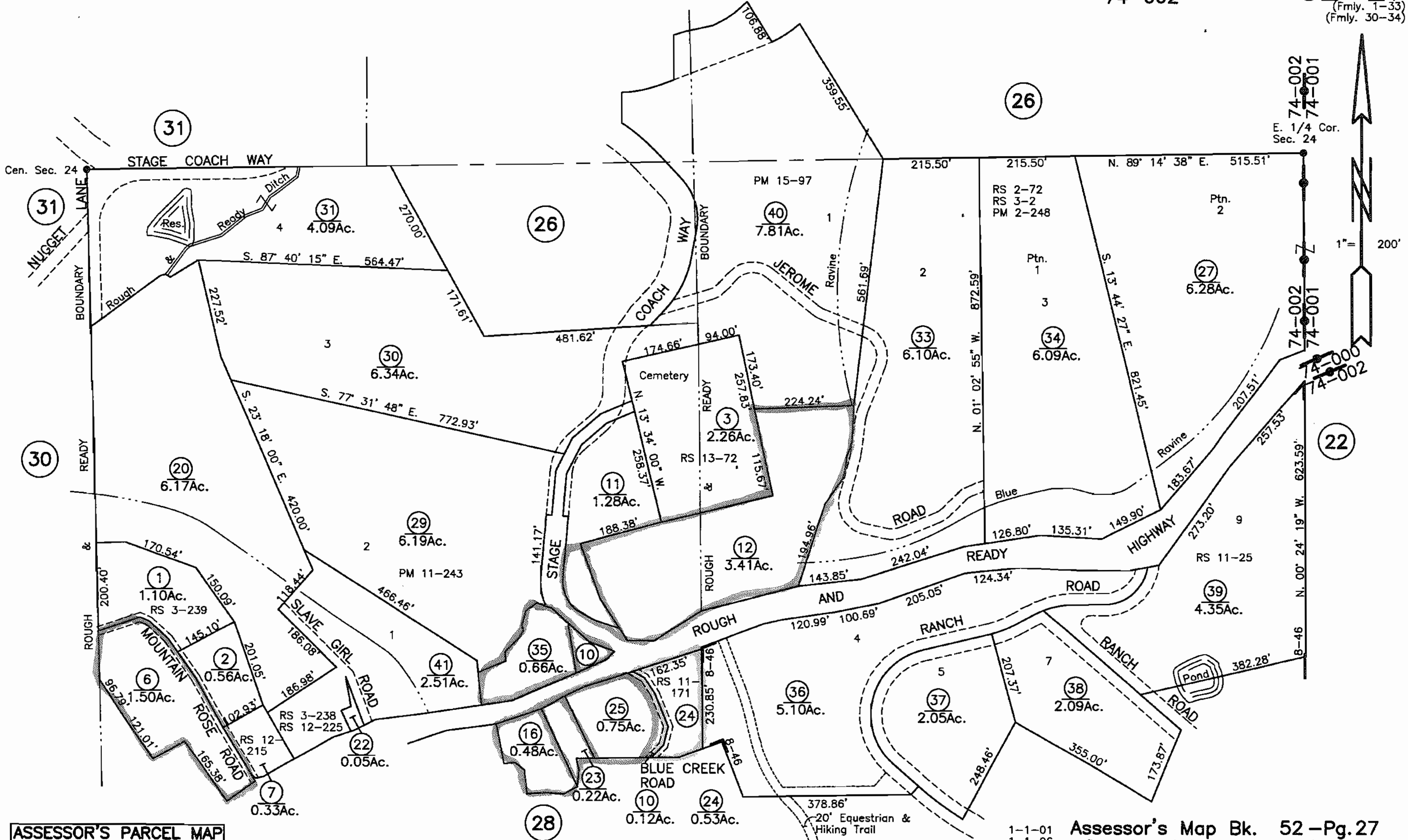


Exhibit 2

PTN. S.E. 1/4 SEC. 24, T. 16 N., R. 7 E., M.D.B. & M.

Tax Area Code 74–002

52–27
(Fmly. 1–33)
(Fmly. 30–34)



ASSESSOR'S PARCEL MAP
This map was prepared for assessment purposes only. No liability is assumed for the accuracy of data shown. Assessor's parcels may not comply with local lot-split or building site ordinances.

ROUGH & READY RANCH ESTATES SUB. Bk. 8, Pg. 46

1-1-01
1-1-06
1-1-09

Assessor's Map Bk. 52 – Pg. 27
County of Nevada, Calif.
2000
LAST UPDATE 12-22-09

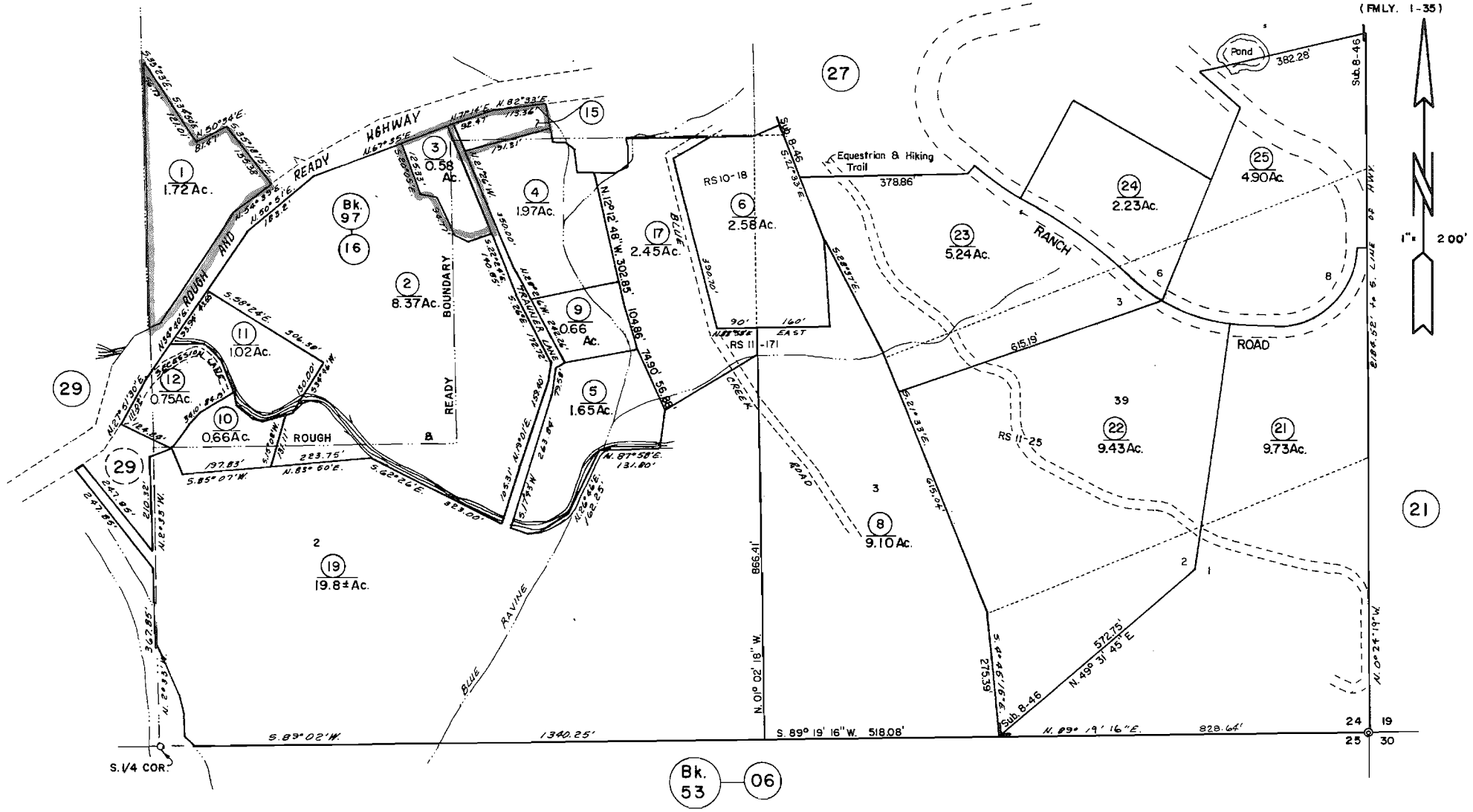
NW 12/00

Exhibit 3

PTN. S.E. 1/4 SEC. 24, T. 16 N., R. 7 E., M.D.B. & M.

Tax Area Code 74-002

52-28 (FMLY. 30-35) (FMLY. 1-35)



ROUGH & READY RANCH ESTATES SUB. Bk. 8 Pg. 46

ASSESSOR'S PARCEL MAP

This map was prepared for assessment purposes only. No liability is assumed for the accuracy of data shown. Assessor's parcels may not comply with local lot-split or building site ordinances.

Assessor's Map Bk. 52 - Pg. 28

County of Nevada, Calif.

1962 3-1-85 3-1-88 3-1-95 1-1-97

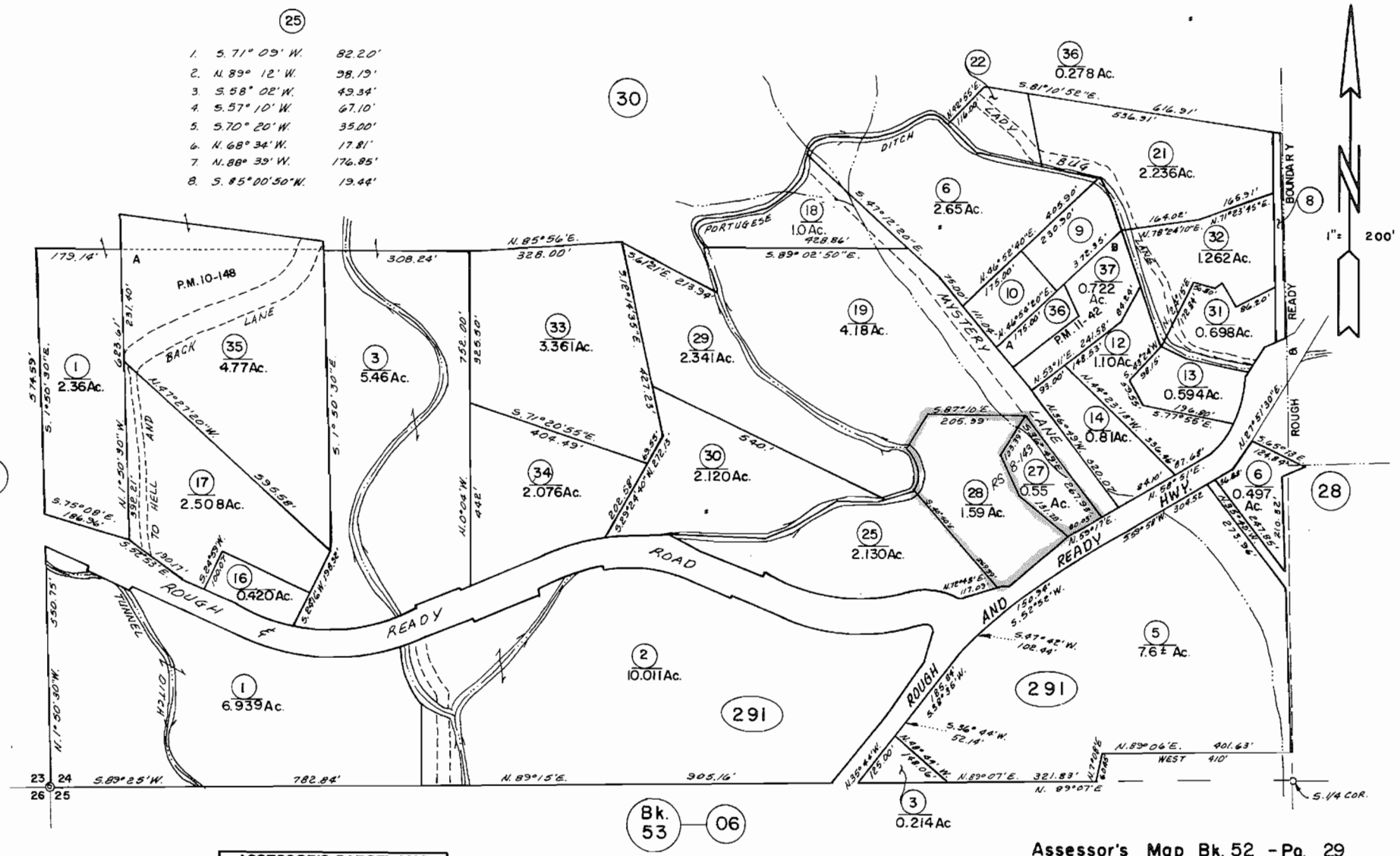
7-84ff

Exhibit 4

S. 1/2 S.W. 1/4 SEC. 24, T. 16 N., R. 7 E., M.D.B. & M.

Tax Area Code 74-002

52-29 (FMLY. 30-37)



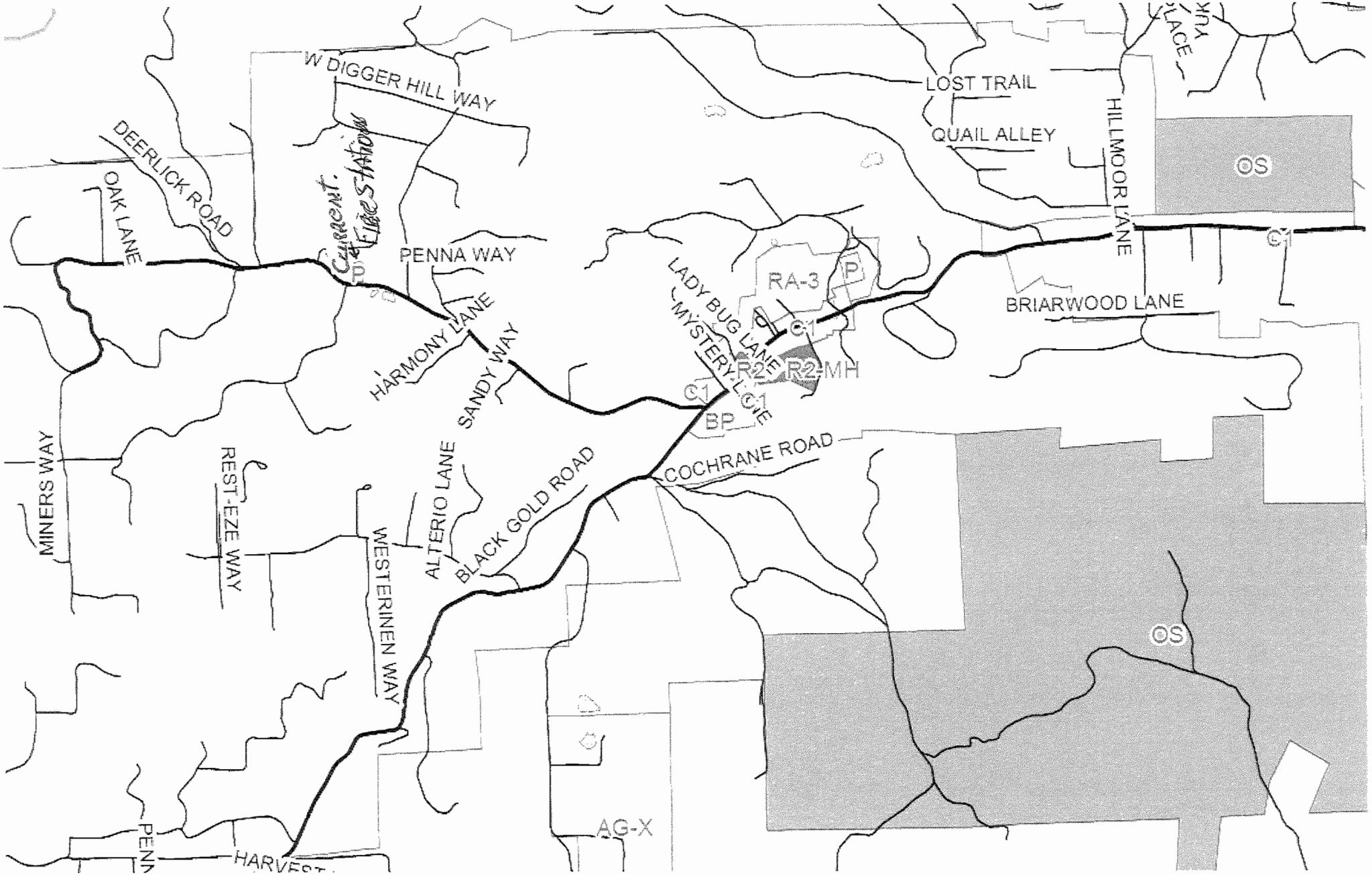
ASSESSOR'S PARCEL MAP

This map was prepared for assessment purposes only. No liability is assumed for the accuracy of data shown. Assessor's parcels may not comply with local lot-split or building site ordinances.

Assessor's Map Bk. 52 - Pg. 29

County of Nevada, Calif.

1962 3-1-82 3-1-83 3-1-85 3-1-88 3-1-90 3-1-93


W DIGGER HILL WAY
DEERLICK ROAD
OAK LANE
Current Lake Shadow
PENNA WAY
HARMONY LANE
SANDY WAY
LADY BUG LANE
MYSTERY LANE
RA-3
P
C1
R2
R2-MH
BP
LOST TRAIL
QUAIL ALLEY
HILLMOOR LANE
OS
BRIARWOOD LANE
COCHRANE ROAD
MINERS WAY
REST-EZE WAY
WESTERINEN WAY
ALTERIO LANE
BLACK GOLD ROAD
AG-X
PENN
HARVEST

Parcel Information - This Site Built by the Nevada County GIS Division

Parcel Report

Site Address	14506 ROUGH & READY HIGHWAY
Assessors Parcel Number	52-270-19 Assessors Map
Acres	0.51
Land Value	10775
Improvements Value	22739
Date of Valuation	06/25/82
Zoning	C1
General Plan Designation	NC
Supervisory District	4
Fire District	ROUGH & READY
School District	READY SPRINGS
Sanitary District	
Census Block Group	3
Census Tract	4.02
Maximum Parcel Elevation	1896
Snowload PSF	29 psf - West Zone
Exposure	B
Climate Zone	11

Legend

Road Names - Near

Parcels

Highways

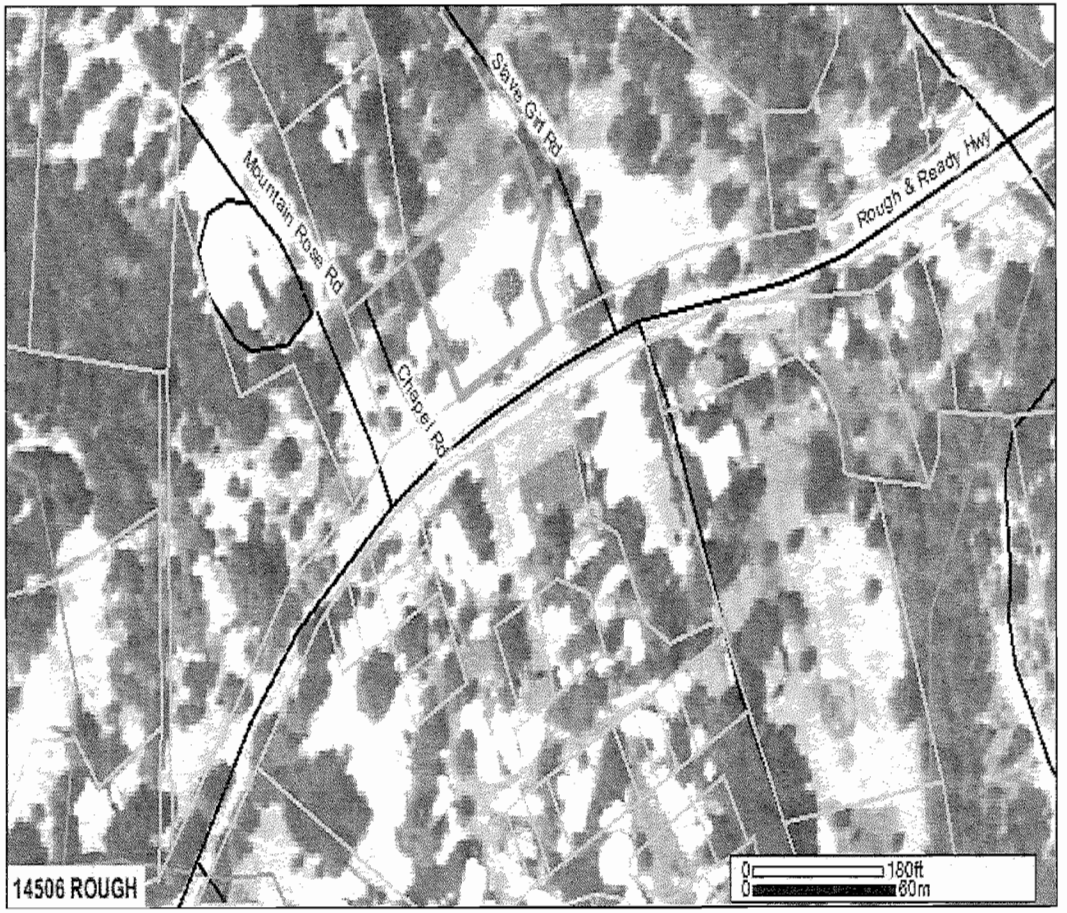
Roads

Lakes

Rivers

Cities

Aerial Photo



N

DISCLAIMER: The County of Nevada assumes no responsibility arising from use of this information. THE MAPS AND ASSOCIATED DATA ARE PROVIDED WITHOUT WARRANTY OF ANY KIND, either expressed or implied, including but not limited to, the implied warranties of merchantability and fitness for a particular purpose. Before making decisions using the information provided on this map, contact the appropriate Nevada County Department to confirm the validity of the data provided.

COUNTY OF NEVADA CALIFORNIA

Custom Soil Resource Report
Soil Map

MAP LEGEND

Area of Interest (AOI)

- Area of Interest (AOI)

Soils

- Soil Map Units

Special Point Features

- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other

Special Line Features

- Gully
- Short Steep Slope
- Other

Political Features

- Cities

Water Features

- Oceans
- Streams and Canals

Transportation

- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

MAP INFORMATION

Map Scale: 1:637 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:24,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 10N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: Nevada County Area, California
Survey Area Data: Version 6, Sep 10, 2008

Date(s) aerial images were photographed: 8/14/2005

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

Nevada County Area, California (CA619)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
TuD	Trabuco-Rock outcrop complex, 15 to 30 percent slopes	1.2	100.0%
Totals for Area of Interest		**1.2**	**100.0%**

Map Unit Descriptions

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the survey area. The map unit descriptions, along with the maps, can be used to determine the composition and properties of a unit.

A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

Most minor soils have properties similar to those of the dominant soil or soils in the map unit, and thus they do not affect use and management. These are called noncontrasting, or similar, components. They may or may not be mentioned in a particular map unit description. Other minor components, however, have properties and behavioral characteristics divergent enough to affect use or to require different management. These are called contrasting, or dissimilar, components. They generally are in small areas and could not be mapped separately because of the scale used. Some small areas of strongly contrasting soils or miscellaneous areas are identified by a special symbol on the maps. If included in the database for a given area, the contrasting minor components are identified in the map unit descriptions along with some characteristics of each. A few areas of minor components may not have been observed, and consequently they are not mentioned in the descriptions, especially where the pattern was so complex that it was impractical to make enough observations to identify all the soils and miscellaneous areas on the landscape.

The presence of minor components in a map unit in no way diminishes the usefulness or accuracy of the data. The objective of mapping is not to delineate pure taxonomic classes but rather to separate the landscape into landforms or landform segments that have similar use and management requirements. The delineation of such segments on the map provides sufficient information for the development of resource plans. If intensive use of small areas is planned, however, onsite investigation is needed to define and locate the soils and miscellaneous areas.

An identifying symbol precedes the map unit name in the map unit descriptions. Each description includes general facts about the unit and gives important soil properties and qualities.

Soils that have profiles that are almost alike make up a *soil series*. Except for differences in texture of the surface layer, all the soils of a series have major horizons that are similar in composition, thickness, and arrangement.

Soils of one series can differ in texture of the surface layer, slope, stoniness, salinity, degree of erosion, and other characteristics that affect their use. On the basis of such differences, a soil series is divided into *soil phases*. Most of the areas shown on the detailed soil maps are phases of soil series. The name of a soil phase commonly indicates a feature that affects use or management. For example, Alpha silt loam, 0 to 2 percent slopes, is a phase of the Alpha series.

Some map units are made up of two or more major soils or miscellaneous areas. These map units are complexes, associations, or undifferentiated groups.

A *complex* consists of two or more soils or miscellaneous areas in such an intricate pattern or in such small areas that they cannot be shown separately on the maps. The pattern and proportion of the soils or miscellaneous areas are somewhat similar in all areas. Alpha-Beta complex, 0 to 6 percent slopes, is an example.

An *association* is made up of two or more geographically associated soils or miscellaneous areas that are shown as one unit on the maps. Because of present or anticipated uses of the map units in the survey area, it was not considered practical or necessary to map the soils or miscellaneous areas separately. The pattern and relative proportion of the soils or miscellaneous areas are somewhat similar. Alpha-Beta association, 0 to 2 percent slopes, is an example.

An *undifferentiated group* is made up of two or more soils or miscellaneous areas that could be mapped individually but are mapped as one unit because similar interpretations can be made for use and management. The pattern and proportion of the soils or miscellaneous areas in a mapped area are not uniform. An area can be made up of only one of the major soils or miscellaneous areas, or it can be made up of all of them. Alpha and Beta soils, 0 to 2 percent slopes, is an example.

Some surveys include *miscellaneous areas*. Such areas have little or no soil material and support little or no vegetation. Rock outcrop is an example.

Nevada County Area, California

TuD—Trabuco-Rock outcrop complex, 15 to 30 percent slopes

Map Unit Setting

Elevation: 800 to 1,800 feet
Mean annual precipitation: 35 to 40 inches
Mean annual air temperature: 60 to 61 degrees F
Frost-free period: 235 to 260 days

Map Unit Composition

Trabuco and similar soils: 65 percent
Rock outcrop: 20 percent
Minor components: 15 percent

Description of Trabuco

Setting

Landform: Hills
Landform position (two-dimensional): Backslope
Landform position (three-dimensional): Side slope
Down-slope shape: Convex
Across-slope shape: Convex
Parent material: Basic residuum weathered from igneous rock

Properties and qualities

Slope: 15 to 30 percent
Depth to restrictive feature: 40 to 70 inches to paralithic bedrock
Drainage class: Well drained
Capacity of the most limiting layer to transmit water (Ksat): Low to moderately low (0.00 to 0.06 in/hr)
Depth to water table: More than 80 inches
Frequency of flooding: None
Frequency of ponding: None
Available water capacity: High (about 9.1 inches)

Interpretive groups

Land capability classification (irrigated): 6e
Land capability (nonirrigated): 6e
Ecological site: GRANITIC (R018XD080CA)

Typical profile

0 to 10 inches: Loam
10 to 15 inches: Clay loam
15 to 40 inches: Clay
40 to 67 inches: Clay loam
67 to 71 inches: Bedrock

Description of Rock Outcrop

Setting

Landform: Hills
Parent material: Granitic rock

Properties and qualities

Slope: 15 to 30 percent

Depth to restrictive feature: 0 inches to lithic bedrock
Capacity of the most limiting layer to transmit water (Ksat): Very low (0.00 to 0.00 in/hr)

Interpretive groups
Land capability (nonirrigated): 8

Typical profile
0 to 4 inches: Bedrock

Minor Components

Shenandoah, sandy loam
Percent of map unit: 5 percent
Landform: Hills

Ahwahnee, sandy loam
Percent of map unit: 5 percent
Landform: Hills

Auberry, sandy loam
Percent of map unit: 5 percent
Landform: Hills

References

American Association of State Highway and Transportation Officials (AASHTO). 2004. Standard specifications for transportation materials and methods of sampling and testing. 24th edition.

American Society for Testing and Materials (ASTM). 2005. Standard classification of soils for engineering purposes. ASTM Standard D2487-00.

Cowardin, L.M., V. Carter, F.C. Golet, and E.T. LaRoe. 1979. Classification of wetlands and deep-water habitats of the United States. U.S. Fish and Wildlife Service FWS/OBS-79/31.

Federal Register. July 13, 1994. Changes in hydric soils of the United States.

Federal Register. September 18, 2002. Hydric soils of the United States.

Hurt, G.W., and L.M. Vasilas, editors. Version 6.0, 2006. Field indicators of hydric soils in the United States.

National Research Council. 1995. Wetlands: Characteristics and boundaries.

Soil Survey Division Staff. 1993. Soil survey manual. Soil Conservation Service. U.S. Department of Agriculture Handbook 18. http://soils.usda.gov/

Soil Survey Staff. 1999. Soil taxonomy: A basic system of soil classification for making and interpreting soil surveys. 2nd edition. Natural Resources Conservation Service, U.S. Department of Agriculture Handbook 436. http://soils.usda.gov/

Soil Survey Staff. 2006. Keys to soil taxonomy. 10th edition. U.S. Department of Agriculture, Natural Resources Conservation Service. http://soils.usda.gov/

Tiner, R.W., Jr. 1985. Wetlands of Delaware. U.S. Fish and Wildlife Service and Delaware Department of Natural Resources and Environmental Control, Wetlands Section.

United States Army Corps of Engineers, Environmental Laboratory. 1987. Corps of Engineers wetlands delineation manual. Waterways Experiment Station Technical Report Y-87-1.

United States Department of Agriculture, Natural Resources Conservation Service. National forestry manual. http://soils.usda.gov/

United States Department of Agriculture, Natural Resources Conservation Service. National range and pasture handbook. http://www.glti.nrcs.usda.gov/

United States Department of Agriculture, Natural Resources Conservation Service. National soil survey handbook, title 430-VI. http://soils.usda.gov/

United States Department of Agriculture, Natural Resources Conservation Service. 2006. Land resource regions and major land resource areas of the United States, the Caribbean, and the Pacific Basin. U.S. Department of Agriculture Handbook 296. http://soils.usda.gov/

United States Department of Agriculture, Soil Conservation Service. 1961. Land capability classification. U.S. Department of Agriculture Handbook 210.

1-27-10

United States Department of Agriculture

NRCS
Natural Resources Conservation Service
Grass Valley Field Office
113 Presley Way, Suite 1
Grass Valley, CA 95945
(530) 272-3417
(530)477-8055 (Fax)

Doug Colucci
USDA Rural Development
9701 Dino Dr., Suite 170
Elk Grove, CA 95624-4025

January 25, 2010

Dear Mr. Colucci:

RE: Rough & Ready Fire Protection District Farmland Conversion Impact Rating

Thank you for your request of January 13, 2010 for a Farmland Conversion Rating for the above project.

The area within the proposed facility does not contain Prime, Unique or Farmland of Statewide or Local Importance. Also, based on the maps the area does not contain any wetlands.

Enclosed is the completed AD-1006 form as requested. If we can be of further assistance please let us know.

Sincerely,

Jason N. Jackson

JASON N. JACKSON
District Conservationist

Enclosure

U.S. Department of Agriculture

FARMLAND CONVERSION IMPACT RATING

PART I *(To be completed by Federal Agency)*	Date Of Land Evaluation Request 1/13/10
Name Of Project Rough and Ready Fire Protection District	Federal Agency Involved USDA, Rural Development
Proposed Land Use New Fire Station Project	County And State Nevada, CA
PART II *(To be completed by NRCS)*	Date Request Received By NRCS 1/14/10

Does the site contain prime, unique, statewide or local important farmland? Yes ☐ No ☒ *(If no, the FPPA does not apply -- do not complete additional parts of this form).*		Acres Irrigated	Average Farm Size
Major Crop(s)	Farmable Land In Govt. Jurisdiction Acres: %	Amount Of Farmland As Defined in FPPA Acres: %	
Name Of Land Evaluation System Used	Name Of Local Site Assessment System	Date Land Evaluation Returned By NRCS 1/14/10	

PART III *(To be completed by Federal Agency)*	Alternative Site Rating Site A	Site B	Site C	Site D
A. Total Acres To Be Converted Directly	0.5			
B. Total Acres To Be Converted Indirectly	0.2			
C. Total Acres In Site	0.7	0.0	0.0	0.0
PART IV *(To be completed by NRCS)* Land Evaluation Information				
A. Total Acres Prime And Unique Farmland				
B. Total Acres Statewide And Local Important Farmland				
C. Percentage Of Farmland In County Or Local Govt. Unit To Be Converted				
D. Percentage Of Farmland In Govt. Jurisdiction With Same Or Higher Relative Value				
PART V *(To be completed by NRCS)* Land Evaluation Criterion Relative Value Of Farmland To Be Converted *(Scale of 0 to 100 Points)*	0	0	0	0

PART VI *(To be completed by Federal Agency)* Site Assessment Criteria *(These criteria are explained in 7 CFR 658.5(b)*	Maximum Points				
1. Area In Nonurban Use					
2. Perimeter In Nonurban Use					
3. Percent Of Site Being Farmed					
4. Protection Provided By State And Local Government					
5. Distance From Urban Builtup Area					
6. Distance To Urban Support Services					
7. Size Of Present Farm Unit Compared To Average					
8. Creation Of Nonfarmable Farmland					
9. Availability Of Farm Support Services					
10. On-Farm Investments					
11. Effects Of Conversion On Farm Support Services					
12. Compatibility With Existing Agricultural Use					
TOTAL SITE ASSESSMENT POINTS	160	0	0	0	0
PART VII *(To be completed by Federal Agency)*					
Relative Value Of Farmland *(From Part V)*	100	0	0	0	0
Total Site Assessment *(From Part VI above or a local site assessment)*	160	0	0	0	0
TOTAL POINTS *(Total of above 2 lines)*	260	0	0	0	0

Site Selected:	Date Of Selection	Was A Local Site Assessment Used? Yes ☐ No ☐

Reason For Selection:

(See Instructions on reverse side)

Form AD-1006 (10-83)

This form was electronically produced by National Production Services Staff

NEVADA COUNTY DEPARTMENT of ENVIRONMENTAL HEALTH

950 Maidu Avenue
P.O. Box 6100
Nevada City, CA 95959-6100
(916) 265-1452

10075 Levone Avenue
Suite 203
Truckee CA 96161
(916) 582-7820

April 16, 1992

Bill Cramer
121 Brewer Lane
Grass Valley, CA 95949

Subject: Underground Storage Tank (UST) Closure Permit Final for

Facility Name	Rough & Ready Exxon
Address:	14506 Rough & Ready Hwy
City:	Rough & Ready, CA 95975
AP Number:	01-330-19
Job Number:	14-00012

Dear Sir/Madam:

The Department has received the necessary information for UST Closure at the subject site. The analytical results of the soil samples were at detectable levels, however, the plume of contamination had been defined with no ground water contamination noted.

This action is based on the information submitted to this Department by you and your consultant, which we understand to be an accurate representation of the soil conditions remaining on site, and UST Closure procedures which were followed.

The Department, by issuance of this letter, has finaled the subject permit.

If you should have any questions, please contact me at (916) 265-1452 between 8:00-9:00 a.m. Monday-Friday.

Sincerely,

Tracy Gidel, R.E.H.S.
Supervising Hazardous Materials Specialist

cc: Gordon Boggs CVRWQCB 3443 Routier Road, Sacramento CA 95827-3058

PETERS'
DRILLING &
PUMP SERVICE

P.O. Box 1546
Grass Valley, CA 95945
Grass Valley (530) 273-8136
Colfax (530) 346-6210
Auburn (530) 888-7311
Lincoln (916) 645-9692
Yuba County (530) 751-9009
FAX (530) 273-1213
Contractors Lic. No. 456136

May 10, 2010

Re: Rough and Ready Fire Department Proposed Project
14506 Rough and Ready Highway
Rough and Ready, CA 95975

Dear Bruce,

In response to your request for information regarding drilling a well at 14506 Rough & Ready Hwy, I offer the following information:

We have been drilling water wells in Nevada County for 27 years and have drilled many in the Rough & Ready area. We have drilled water wells on the properties neighboring the parcel in question, in fact properties with common property lines. These wells have been high producing wells of good quality water. Occasionally a well will require filtration for the removal of iron; this can be accomplished inexpensively, if necessary.

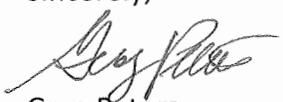
The production of the wells surrounding the parcel in question is well above average for Nevada County.
For instance, the well on the adjoining property to the east produces 30 gallons per minute and the well directly across the Rough & Ready Hwy produces 60 gallons per minute. These are very high producing wells and well above the Nevada County requirement of 3 gallons per minute that is required to obtain a building permit for a new dwelling.

We recommend the installation of a commercial Class II well seal which is the 50 foot seal used for wells constructed for churches, schools, restaurants and other commercial buildings that expect to have a large number of people using the well. The annual seal is the sealing material that is placed between the casing and the bore hole to provide protection from pollution entering the well. Class I well seals are the 20 foot annular seals that we use to construct wells for single family residences.

The effect of the fire station well on neighboring wells should be nonexistent. I understand that there is irrigation water available on the property that will be used for landscaping, etc. This would leave the fire station well used for basically domestic use with the total water usage of under 1000 gallons per day.

Please let me know if you have any further questions!

Sincerely,



Greg Peters
Peters' Drilling & Pump Service

Steven L. DeCamp
Community Development Agency Director

Wesley Nicks, REHS
Director of Environmental Health

COUNTY OF NEVADA
COMMUNITY DEVELOPMENT AGENCY
ENVIRONMENTAL HEALTH DEPARTMENT
950 MAIDU AVENUE, SUITE 170, NEVADA CITY, CA 95959-8617
(530) 265-1222 FAX (530) 265-9853 www.mynevadacounty.com

May 13, 2010

Rough and Ready Fire Department
14506 Rough and Ready Highway
Rough and Ready, CA 95975

Re: Fire Department On-Site Sewage Disposal System (Septic System)

Dear Sirs:

The Nevada County Department of Environmental Health is the Local Administrative/Enforcement Agency having jurisdiction over permitting and construction of septic systems. A Registered Professional Environmental Health Specialist employed with Environmental Health observed the soil testing and analysis for the proposed septic system location. The proposed location meets the Nevada County On-Site Sewage Disposal Ordinance and Regulations for protection of groundwater and public safety.

Based on other similar sized fire departments within the county, it is anticipated that a septic system sized between 500-750 gallons will be adequate to serve the needs of the Rough and Ready Fire Department. The Environmental Health Department has determined that there are more than sufficient resources available and have no objection with the installation of an on-site sewage disposal system for the Rough and Ready Fire Department.

Upon issuance of a construction permit, Environmental Health will conduct inspections for compliance with the Nevada County On-Site Sewage Disposal Ordinance and Regulations and will issue a certificate of compliance upon completion.

Should you have any questions please contact me at kurtis.zumwalt@co.nevada.ca.us or 530.265.1467.

Sincerely,

Kurtis Zumwalt, REHS 5613, CHMT
Program Manager

RFE Engineering, Inc.

Civil Engineers • Planners • Surveyors
8680 Greenback Lane, Suite 107, Orangevale, CA 95662
Phone 916-989-3285 Fax 916-989-3597
www.RFEengineering.com

May 19, 2010

Mr. Don Gannon, Fire Chief
Rough and Ready Fire Protection District
14506 Rough and Ready Highway
Rough and Ready, CA 95975

RE: TEMPORARY AND LONG TERM WATER QUALITY FEATURES INCLUDED IN THE PROPOSED FIRE HOUSE DEVELOPMENT

Dear Mr. Gannon:

Bruce Ivy requested we send you a summary of the temporary and long term water quality features included in the design for the proposed fire house development in Rough and Ready. The following should provide an overview of this for you.

The project includes the construction of a new fire house with paved parking areas and access road. The overall project construction site is 1.1± acres. The existing structure with paved driveways and parking areas that is currently used by the fire district will be demolished and replaced by the new development. The existing site has 0.3± acre of impervious area (this includes roof areas, paved areas and compacted earth roadways that have minimal infiltration capabilities). The proposed project will have approximately 0.75 acre of impervious surfaces (roof, sidewalks, paved parking and access road).

The proposed Best Management Practices (BMPs) described in this letter are designated as temporary and long term. Temporary BMPs are those utilized during the construction phase of the project and are no longer required once the project has been constructed and the site stabilized. Long Term BMPs are improvements that are constructed as part of the project and will remain to provide site stabilization and erosion and sediment control for the longer term. Both temporary and long term BMPs require periodic inspection and maintenance to ensure that they continue to function as intended, providing erosion and sediment control and surface water treatment prior to discharge off-site into the existing storm drainage system.

During the construction of the project temporary BMPs will be implemented by the contractor to control erosion, sedimentation, dust and discharge of any hazardous materials associated with the construction. The project improvement plans include an erosion control plan with applicable notes and details for the contractor to use as a guide. The erosion and sediment control BMPs proposed include installation of fiber rolls around the perimeter of the project site and as needed internally to intercept sediment and reduce velocities of water on slopes to minimize erosion. Additionally, a construction entrance will be needed at the specific access point to the site for construction. This will aid in removing soil from vehicle tires exiting the site and reduce the potential for tracking sediment off-site. The contractor will sweep off-site roadways each day as required to remove sediment that may have been deposited due to the construction. All storm drain inlets, existing and proposed, on-site and immediately downstream of the project site will be

installed with gravel bag inlet barriers and inlet filters. These are intended to intercept sediment and debris and prevent them from entering the storm drain system and ultimately downstream channels. Any dewatering shall be discharged into dewatering bags or other acceptable filtering system to allow any sediment to be removed before discharging into the storm drain system. A specific staging area is designated on the plans and will be utilized by the contractor for fueling, minor vehicle maintenance and material storage. The contractor shall implement good housekeeping measures for solid waste, material delivery and storage, concrete waste, paint and painting supplies, vehicle fueling and minor maintenance and hazardous waste. Dust control shall be provided during the entire construction phase until long term improvements have been installed and dust control is no longer required. Disturbed areas that are not covered by long term improvements including landscaping will be hydro-seeded with a native grass mix and mulched as needed to reduce erosion and help stabilize the areas. Maintenance and inspection of the temporary facilities before a storm event and immediately after with required repairs and replacements completed immediately will reduce the possibility of impacts to water quality or adjacent properties by this project.

Long term soil stabilization for this project will primarily be a result of the paved areas, hardscape and landscaping included in the design. Areas that have been disturbed that are not covered by landscaping, building, hardscape or paving will be stabilized with the hydro-seeding and mulch as noted above as part of the temporary BMPs. Such areas will need to be monitored and any damage repaired until such areas have stabilized.

Proposed long term water quality features include specific water quality inlets and manhole to treat on-site storm water runoff before discharging into the storm off-site storm drain system. A hydrodynamic separation manhole is proposed for stormwater runoff from the building and northern portions of the site and water quality filtering inlets with oil absorbent pillows for the private drive and front portion of the site are proposed. Both units will require periodic inspection and maintenance to ensure that the facilities continue to operate as intended. Inspections should be completed at a minimum once in the dry season to ensure the units are ready for the wet season. During wet weather these units should be inspected after every major storm and on a monthly basis at a minimum. Cleaning and oil absorbent pillow replacement must be provided as needed to maintain the effectiveness of these units. A typical requirement for oil absorbent pillow replacement is once a year, depending on the amount of oil in the shed area.

We trust this provides the project water quality information needed. Please let us know if you have any further questions regarding this.

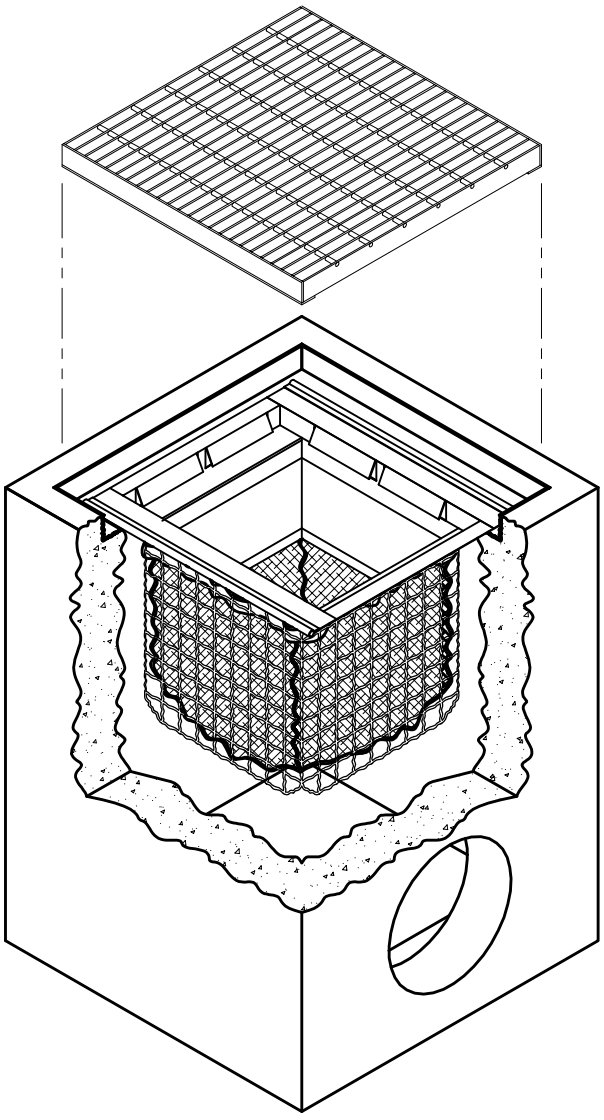
Sincerely,

Ron Wood

Ron Wood, P.E.
Senior Engineer

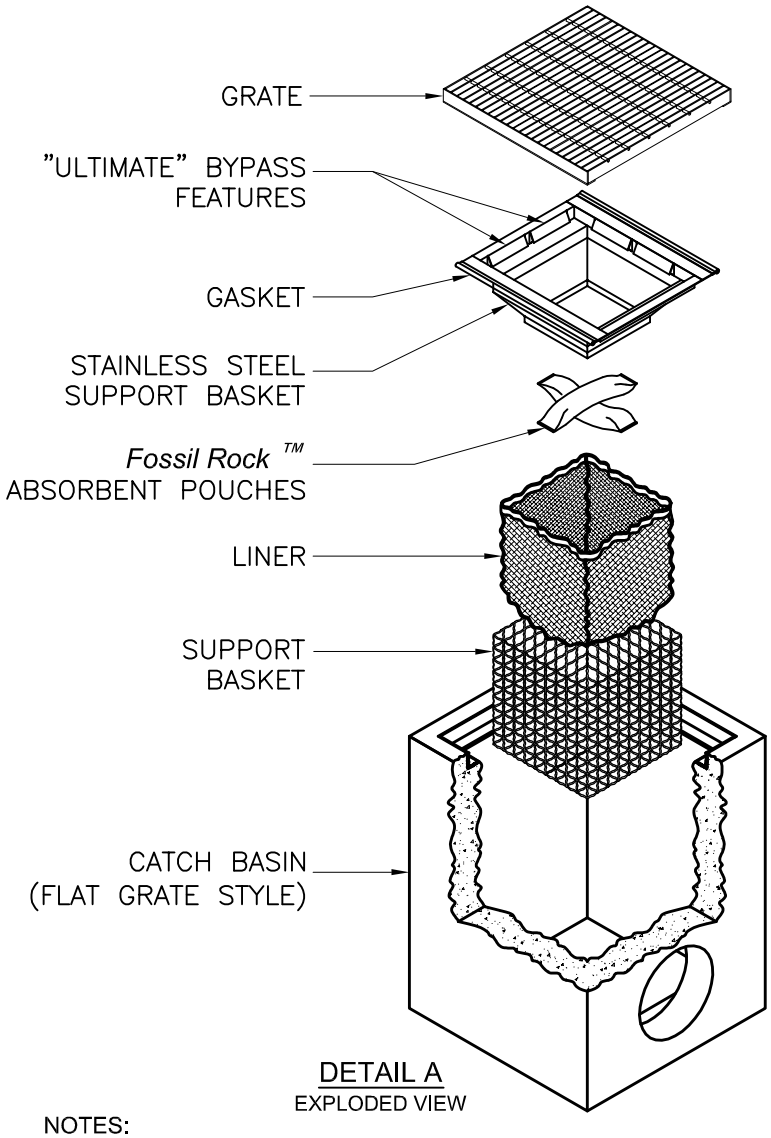
cc: Bruce Ivy
Kevin Hallock, Gordon Rogers Arch

FGP-0001



FLOGARD+PLUS® FILTER
-INSTALLED INTO CATCH BASIN-

U.S. PATENT # 6,00,023 & 6,877,029



DETAIL A
EXPLODED VIEW

NOTES:

1. FloGard®+Plus (frame mount) high capacity catch basin inserts are available in most sizes and styles (see specifier chart, sheet 2 of 2). Refer to the FloGard®+Plus (wall mount) insert for devices to fit non-standard, or combination style catch basins.
2. Filter insert shall have both an "initial" filtering bypass and "ultimate" high flow bypass feature.
3. Filter support frame shall be constructed from stainless steel Type 304.
4. Allow a minimum of 2.0 feet, of clearance between the bottom of the grate and top of outlet pipe(s), or refer to the FloGard® insert for "shallow" installations.
5. Filter medium shall be *Fossil Rock* ™, installed and maintained in accordance with manufacturer specifications.
6. Storage capacity reflects 80% of maximum solids collection prior to impeding filtering bypass.
7. Filtered flow r/rate includes a safety factor of two.

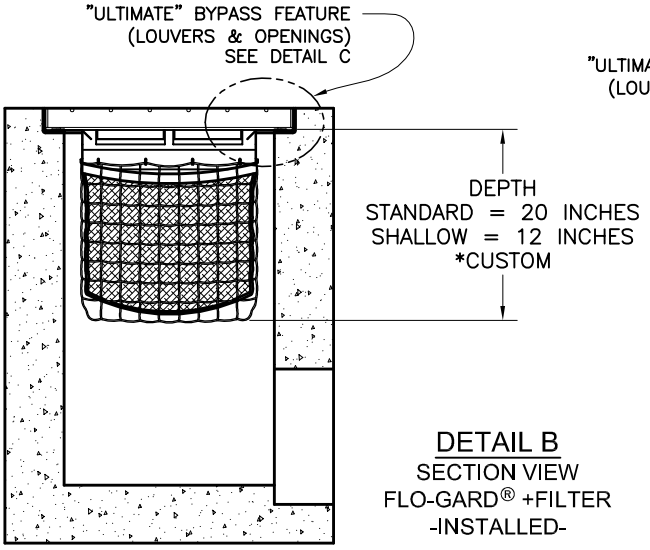
TITLE

FloGard®+PLUS
CATCH BASIN FILTER INSERT
(Flat Grated Inlet Style)

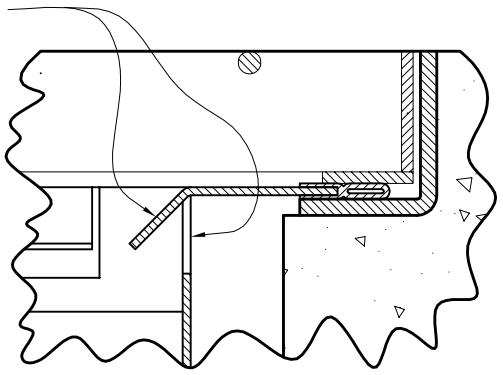
KriStar Enterprises, Inc.
360 Sutton Place, Santa Rosa, CA 95407
Ph: 800.579.8819, Fax: 707.524.8186, www.kristar.com

DRAWING NO.	REV	ECO	DATE	
FGP-0001	D	0059 JPR 12/30/08	JPR 11/3/06	SHEET 1 OF 2

U.S. PATENT # 6,00,023 & 6,877,029



DETAIL B
SECTION VIEW
FLO-GARD® +FILTER
-INSTALLED-



DETAIL C
"ULTIMATE"
BYPASS FEATURES

* MANY OTHER STANDARD & CUSTOM SIZES & DEPTHS AVAILABLE UPON REQUEST.

SPECIFIER CHART

MODEL NO. STANDARD DEPTH	STANDARD & SHALLOW DEPTH (Data in these columes is the same for both STANDARD & SHALLOW versions)			STANDARD DEPTH -20 Inches-		MODEL NO. SHALLOW DEPTH	SHALLOW DEPTH -12 Inches-	
	INLET ID Inside Dimension (inch x inch)	GRATE OD Outside Dimension (inch x inch)	TOTAL BYPASS CAPACITY (cu. ft. / sec.)	SOLIDS STORAGE CAPACITY (cu. ft.)	FILTERED FLOW (cu. ft. / sec.)		SOLIDS STORAGE CAPACITY (cu. ft.)	FILTERED FLOW (cu. ft. / sec.)
FGP-12F	12 X 12	12 X 14	2.8	0.3	0.4	FGP-12F8	.15	.25
FGP-1530F	15 X 30	15 X 35	6.9	2.3	1.6	FGP-1530F8	1.3	.9
FGP-16F	16 X 16	16 X 19	4.7	0.8	0.7	FGP-16F8	.45	.4
FGP-1624F	16 X 24	16 X 26	5.0	1.5	1.2	FGP-1624F8	.85	.7
FGP-18F	18 X 18	18 X 20	4.7	0.8	0.7	FGP-18F8	.45	.4
FGP-1820F	16 X 19	18 X 21	5.9	2.1	1.4	FGP-1820F8	1.2	.8
FGP-1824F	16 X 22	18 X 24	5.0	1.5	1.2	FGP-1824F8	.85	.7
FGP-1836F	18 X 36	18 X 40	6.9	2.3	1.6	FGP-1836F8	1.3	.9
FGP-2024F	18 X 22	20 X 24	5.9	1.2	1.0	FGP-2024F8	.7	.55
FGP-21F	22 X 22	22 X 24	6.1	2.2	1.5	FGP-21F8	1.25	.85
FGP-2142F	21 X 40	24 X 40	9.1	4.3	2.4	FGP-2142F8	2.45	1.35
FGP-2148F	19 X 46	22 X 48	9.8	4.7	2.6	FGP-2148F8	2.7	1.5
FGP-24F	24 X 24	24 X 27	6.1	2.2	1.5	FGP-24F8	1.25	.85
FGP-2430F	24 X 30	26 X 30	7.0	2.8	1.8	FGP-2430F8	1.6	1.05
FGP-2436F	24 X 36	24 X 40	8.0	3.4	2.0	FGP-2436F8	1.95	1.15
FGP-2448F	24 X 48	26 X 48	9.3	4.4	2.4	FGP-2448F8	2.5	1.35
FGP-28F	28 X 28	32 X 32	6.3	2.2	1.5	FGP-28F8	1.25	.85
FGP-2440F	24 X 36	28 X 40	8.3	4.2	2.3	FGP-2440F8	2.4	1.3
FGP-30F	30 X 30	30 X 34	8.1	3.6	2.0	FGP-30F8	2.05	1.15
FGP-36F	36 X 36	36 X 40	9.1	4.6	2.4	FGP-36F8	2.65	1.35
FGP-3648F	36 X 48	40 X 48	11.5	6.8	3.2	FGP-3648F8	3.9	1.85
FGP-48F	48 X 48	48 X 54	13.2	9.5	3.9	FGP-48F8	5.45	2.25
FGP-SD24F	24 X 24	28 X 28	6.1	2.2	1.5	FGP-SD24F8	1.25	.85
FGP-1836FGO	18 X 36	20 X 40	6.9	2.3	1.6	FGP-1836F8GO	1.3	.9
FGP-2436FGO	20 X 36	24 X 40	8.0	3.4	2.0	FGP-2436F8GO	1.95	1.15
FGP-48FGO	18 X 48	20 X 54	6.3	2.2	1.5	FGP-48F8GO	1.25	.85

TITLE

FloGard® +PLUS

CATCH BASIN FILTER INSERT

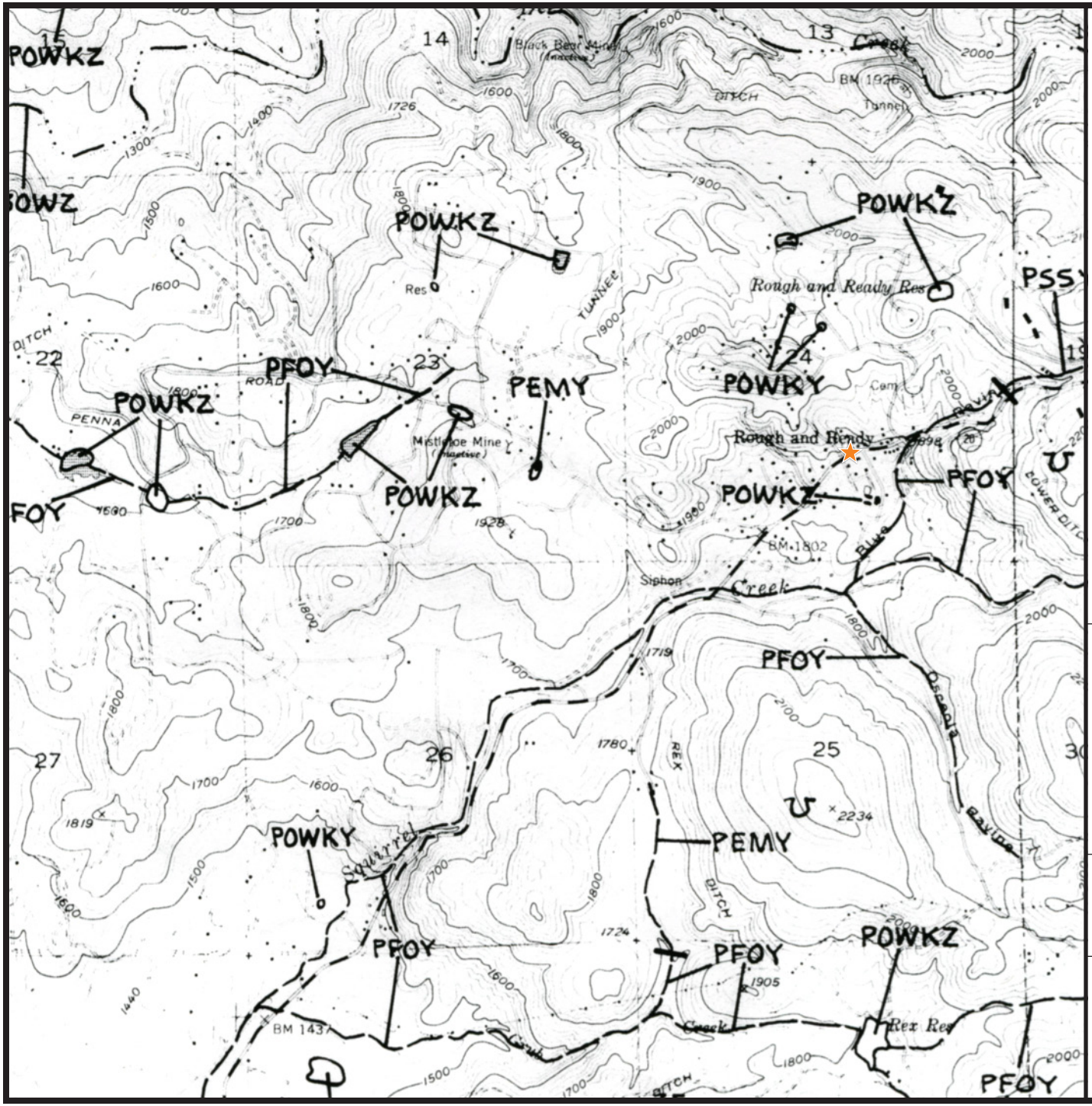
(Flat Grated Inlet Style)

KriStar Enterprises, Inc.

360 Sutton Place, Santa Rosa, CA 95407

Ph: 800.579.8819, Fax: 707.524.8186, www.kristar.com

DRAWING NO.	REV	ECO	DATE	
FGP-0001	D	0059 JPR 12/30/08	JPR 11/3/06	SHEET 2 OF 2



Eco Synthesis
SCIENTIFIC & REGULATORY SERVICES INC

N

Rough and Ready Fire Department Environmental Assessment

National Wetland Inventory Map (undated)

Portion of Rough and Ready quadrangle showing project site (★).

0 1000 2000 3000 4000

Scale 1 : 24,000 (1 in = 2,000 ft)

BRUCE IVY
CONSTRUCTION

Adrian Juncosa **10/08/09**

Re: Rough and Ready Fire

This is a summary of the fact relating to the artificial water source and how it has been repaired:

The Rough and Ready Fire District maintains a 100,000 gallon redwood water tank which is located on a neighboring parcel up the hill from the proposed fire station project. They have an easement to the tank, and use this water storage to furnish water to a fire hydrant located on Rough and Ready Highway.

The 100,000 gallon tank is filled with irrigation water from a Nevada Irrigation District (NID) ditch. Currently there is not a float/value system at the tank that stops the flow from the ditch into the tank when the tank is full. The inflow to the tank is controlled manually by blocking the input from the NID ditch.

A result of this system of water control, is that from time to time the water flowing into the tank is not shut off when the tank becomes full. When this occurs the water flowing into the full tank overflows and spills down the hill. The districts input from the ditch is equivalent to 1" of water which translates to a flow in excess of 600 gallons per hour.

When the department became aware that the water going into the tank was not shut off, they did visit the ditch and manually shut off the flow into the tank. This was sometime in August but the specific date is not known with certainty.

In early September the Fire Department discovered a leak in the NID ditch. The water leaking from the ditch travels the same path as the overflow from the tank.

Bob Vaughn, Assistant Fire Chief contacted NID regarding this leak. He met with Ken Hart, from NID, on site September 9, 2009. Upon their review they discovered the source of the leak in the ditch. NID estimated that the leak was spilling more than 1200 gallons per hour.

NID was out on September 10, 2009 and repaired the leak in the ditch.

So, at the time of your initial site visit the tank was overflowing <u>and</u> the NID ditch was leaking, sending approximately 1800 gallons per hour down the hill.

We believe these actions will result in the total elimination of the artificial water with the effected area drying up and returning to its natural state.

r&r\leaks

143A SPRINGHILL DRIVE, GRASS VALLEY, CA 95945 • 530.272.2135 • FAX 530.272.3925 • brucelvy@abcglobal.net • SCL #338270

CESPK-CO-R (1145) 13 Feb 2004

REGULATORY BRANCH MEMORANDUM 2004-03

SUBJECT: "Leaky Ditch" Wetlands

1. Purpose. To establish policy for "leaky ditch" wetlands.

2. Applicability. This applies to all actions in the Sacramento District.

3. References.

a. Federal Register, Vol. 51, No. 219, dated 13 November 1986, page 41217.

b. Regulatory Branch Office Memorandum 2003-04, "Irrigated" Wetlands, dated 31 Oct 2003.

c. 33 CFR 328: Definition of Waters of the United States.

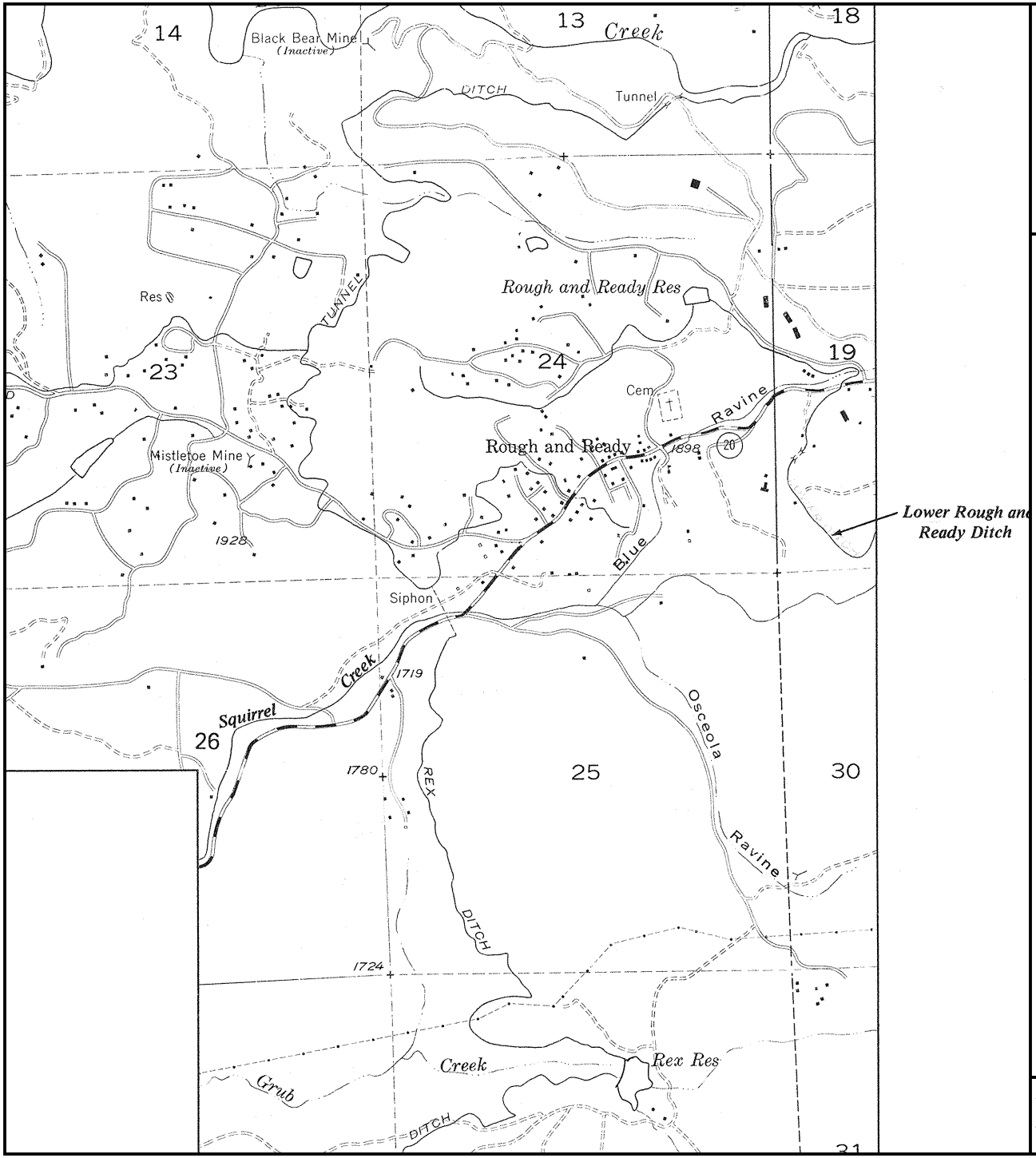
4. Definition. A "leaky ditch" wetland is an area down slope from an irrigation ditch that meets the definition of wetlands in accordance with the Corps' Wetland Delineation Manual where the hydrology is due solely to leakage from the ditch.

5. Background. Reference 3a states that artificially irrigated areas, which would revert to upland if the irrigation ceased, and irrigation ditches excavated on dry land are generally not considered to be waters of the United States. Reference 3b identifies the procedures to be used in differentiating between natural and artificially irrigated wetlands. Some leaky ditch wetlands have been considered "waters of the United States" in the past since they did not meet a strict interpretation as irrigated. This has resulted in confusion and an appearance of inconsistency.

6. Policy. Wetlands created solely by leakage from irrigation ditches will be considered "artificially irrigated wetlands." Accordingly, such wetlands will not be considered waters of the U.S. Where there is uncertainty regarding the source of hydrology for the

wetland, we will assume that the wetland is supported, at least partially, by natural hydrology unless clearly demonstrated otherwise. In such cases the wetland would be jurisdictional until shown to be due solely to a leaky ditch.

ANDREW J. ROSENAU
Chief, Regulatory Branch



N

APPROXIMATE SCALE

2000 0 2000 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

NEVADA COUNTY, CALIFORNIA

(UNINCORPORATED AREAS)

PANEL 600 OF 775

(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
060210 0600 B

EFFECTIVE DATE:
JANUARY 19, 1983

Federal Emergency Management Agency

Eco Synthesis
SCIENTIFIC & REGULATORY SERVICES, INC.

Rough and Ready Volunteer Fire Department

Environmental Assessment

Aerial photograph of site, USGS imagery

Scale approximately 1" = 60'

See Appendix item 3.2 for project layout overlain on aerial photograph. See Appendix item 4.1.7B for delineation of terrestrial community types.

EcoSynthesis
SCIENTIFIC & REGULATORY SERVICES INC

Rough and Ready Fire Station Project Biological Inventory

APN 052-270-019, and -028 (portion)

Figure 1. Biological Resources Map

N

0 25 50 75 100

Scale 1 : 600 (1 in = 50 ft)

Legend

- Urbanized/Non-native Vegetation
- Annual Grassland
- Needle-grass Grassland
- Mixed Oak/Pine Woodland

Notes

Portions of APN 052-270-028 extend beyond inventory study area shown here, which includes the entire project construction footprint.

U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office
Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 100610065213

Database Last Updated: April 29, 2010

Quad Lists

GRASS VALLEY (542A)
Listed Species

Invertebrates
Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Fish
Hypomesus transpacificus
delta smelt (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)

Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians
Rana draytonii
California red-legged frog (T)

Plants
Calystegia stebbinsii
Stebbins's morning-glory (E)

Fremontodendron californicum ssp. decumbens
Pine Hill flannelbush (E)

ROUGH AND READY (542B)
Listed Species

Invertebrates
Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Fish
Hypomesus transpacificus
delta smelt (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)

Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians

Rana draytonii
California red-legged frog (T)

County Lists

No county species lists requested.

Key:

(E) *Endangered* - Listed as being in danger of extinction.
(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.
(P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.
(NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.
Critical Habitat - Area essential to the conservation of a species.
(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.
(C) *Candidate* - Candidate to become a proposed species.
(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
(X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list. See our Protocol and Recovery Permits pages.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

> Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal consultation with the Service.

  During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

  Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our Map Room page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. More info

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be September 08, 2010.

U.S. Fish & Wildlife Service
Sacramento Fish & Wildlife Office
Federal Endangered and Threatened Species that Occur in or may be Affected by Projects in the Counties and/or U.S.G.S. 7 1/2 Minute Quads you requested

Document Number: 100610065947

Database Last Updated: April 29, 2010

Quad Lists

FRENCH CORRAL (558C)
Listed Species

Invertebrates
Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Fish
Hypomesus transpacificus
delta smelt (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)

Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians
Rana draytonii
California red-legged frog (T)

NEVADA CITY (558D)
Listed Species

Invertebrates
Desmocerus californicus dimorphus
valley elderberry longhorn beetle (T)

Fish
Hypomesus transpacificus
delta smelt (T)

Oncorhynchus mykiss
Central Valley steelhead (T) (NMFS)

Oncorhynchus tshawytscha
Central Valley spring-run chinook salmon (T) (NMFS)
winter-run chinook salmon, Sacramento River (E) (NMFS)

Amphibians
Rana draytonii
California red-legged frog (T)
Critical habitat, California red-legged frog (X)

Proposed Species

Amphibians

Rana draytonii

Critical habitat, California red-legged frog (PX)

Candidate Species

Mammals

Martes pennanti

fisher (C)

County Lists

No county species lists requested.

Key:

(E) *Endangered* - Listed as being in danger of extinction.
(T) *Threatened* - Listed as likely to become endangered within the foreseeable future.
(P) *Proposed* - Officially proposed in the Federal Register for listing as endangered or threatened.
(NMFS) Species under the Jurisdiction of the National Oceanic & Atmospheric Administration Fisheries Service. Consult with them directly about these species.
Critical Habitat - Area essential to the conservation of a species.
(PX) *Proposed Critical Habitat* - The species is already listed. Critical habitat is being proposed for it.
(C) *Candidate* - Candidate to become a proposed species.
(V) Vacated by a court order. Not currently in effect. Being reviewed by the Service.
(X) *Critical Habitat* designated for this species

Important Information About Your Species List

How We Make Species Lists

We store information about endangered and threatened species lists by U.S. Geological Survey 7½ minute quads. The United States is divided into these quads, which are about the size of San Francisco.

The animals on your species list are ones that occur within, **or may be affected by** projects within, the quads covered by the list.

- Fish and other aquatic species appear on your list if they are in the same watershed as your quad or if water use in your quad might affect them.
- Amphibians will be on the list for a quad or county if pesticides applied in that area may be carried to their habitat by air currents.
- Birds are shown regardless of whether they are resident or migratory. Relevant birds on the county list should be considered regardless of whether they appear on a quad list.

Plants

Any plants on your list are ones that have actually been observed in the area covered by the list. Plants may exist in an area without ever having been detected there. You can find out what's in the surrounding quads through the California Native Plant Society's online Inventory of Rare and Endangered Plants.

Surveying

Some of the species on your list may not be affected by your project. A trained biologist and/or botanist, familiar with the habitat requirements of the species on your list, should determine whether they or habitats suitable for them may be affected by your project. We recommend that your surveys include any proposed and candidate species on your list.

See our Protocol and Recovery Permits pages.

For plant surveys, we recommend using the Guidelines for Conducting and Reporting Botanical Inventories. The results of your surveys should be published in any environmental documents prepared for your project.

Your Responsibilities Under the Endangered Species Act

All animals identified as listed above are fully protected under the Endangered Species Act of 1973, as amended. Section 9 of the Act and its implementing regulations prohibit the take of a federally listed wildlife species. Take is defined by the Act as "to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect" any such animal.

> Take may include significant habitat modification or degradation where it actually kills or injures wildlife by significantly impairing essential behavioral patterns, including breeding, feeding, or shelter (50 CFR §17.3).

Take incidental to an otherwise lawful activity may be authorized by one of two procedures:

- If a Federal agency is involved with the permitting, funding, or carrying out of a project that may result in take, then that agency must engage in a formal consultation with the Service.

  During formal consultation, the Federal agency, the applicant and the Service work together to avoid or minimize the impact on listed species and their habitat. Such consultation would result in a biological opinion by the Service addressing the anticipated effect of the project on listed and proposed species. The opinion may authorize a limited level of incidental take.

- If no Federal agency is involved with the project, and federally listed species may be taken as part of the project, then you, the applicant, should apply for an incidental take permit. The Service may issue such a permit if you submit a satisfactory conservation plan for the species that would be affected by your project.

  Should your survey determine that federally listed or proposed species occur in the area and are likely to be affected by the project, we recommend that you work with this office and the California Department of Fish and Game to develop a plan that minimizes the project's direct and indirect impacts to listed species and compensates for project-related loss of habitat. You should include the plan in any environmental documents you file.

Critical Habitat

When a species is listed as endangered or threatened, areas of habitat considered essential to its conservation may be designated as critical habitat. These areas may require special management considerations or protection. They provide needed space for growth and normal behavior; food, water, air, light, other nutritional or physiological requirements; cover or shelter; and sites for breeding, reproduction, rearing of offspring, germination or seed dispersal.

Although critical habitat may be designated on private or State lands, activities on these lands are not restricted unless there is Federal involvement in the activities or direct harm to listed wildlife.

If any species has proposed or designated critical habitat within a quad, there will be a separate line for this on the species list. Boundary descriptions of the critical habitat may be found in the Federal Register. The information is also reprinted in the Code of Federal Regulations (50 CFR 17.95). See our Map Room page.

Candidate Species

We recommend that you address impacts to candidate species. We put plants and animals

on our candidate list when we have enough scientific information to eventually propose them for listing as threatened or endangered. By considering these species early in your planning process you may be able to avoid the problems that could develop if one of these candidates was listed before the end of your project.

Species of Concern

The Sacramento Fish & Wildlife Office no longer maintains a list of species of concern. However, various other agencies and organizations maintain lists of at-risk species. These lists provide essential information for land management planning and conservation efforts. More info

Wetlands

If your project will impact wetlands, riparian habitat, or other jurisdictional waters as defined by section 404 of the Clean Water Act and/or section 10 of the Rivers and Harbors Act, you will need to obtain a permit from the U.S. Army Corps of Engineers. Impacts to wetland habitats require site specific mitigation and monitoring. For questions regarding wetlands, please contact Mark Littlefield of this office at (916) 414-6580.

Updates

Our database is constantly updated as species are proposed, listed and delisted. If you address proposed and candidate species in your planning, this should not be a problem. However, we recommend that you get an updated list every 90 days. That would be September 08, 2010.

California Department of Fish and Game
Natural Diversity Database
Selected Elements by Scientific Name – Portrait
Element List for Rough and Ready, Grass Valley, French Corral, and Nevada City quadrangles

	Scientific Name/Common Name	Element Code	Federal Status	State Status	GRank	SRank	CDFG or CNPS
1	***Actinemys marmorata*** western pond turtle	ARAAD02030			G3G4	S3	SC
2	***Calystegia stebbinsii*** Stebbins' morning-glory	PDCON040H0	Endangered	Endangered	G1	S1.1	1B.1
3	***Clarkia biloba ssp. brandegeeae*** Brandegee's clarkia	PDONA05053			G4G5T3	S3	1B.2
4	***Didymodon norrisii*** Norris' beard moss	NBMUS2C0H0			G2G3	S2.2	2.2
5	***Fremontodendron decumbens*** Pine Hill flannelbush	PDSTE03030	Endangered	Rare	G1	S1.2	1B.2
6	***Fritillaria eastwoodiae*** Butte County fritillary	PMLIL0V060			G3Q	S3	3.2
7	***Laterallus jamaicensis coturniculus*** California black rail	ABNME03041		Threatened	G4T1	S1	
8	***Lewisia cantelovii*** Cantelow's lewisia	PDPOR04020			G3	S3.2	1B.2
9	***Melichhoferia elongata*** elongate copper moss	NBMUS4Q022			G4?	S2.2	2.2
10	***Phrynosoma blainvillii*** coast horned lizard	ARACF12100			G4G5	S3S4	SC
11	***Rana boylii*** foothill yellow-legged frog	AAABH01050			G3	S2S3	SC
12	***Rhynchospora capitellata*** brownish beaked-rush	PMCYP0N080			G5	S2S3	2.2
13	***Sidalcea stipularis*** Scadden Flat checkerbloom	PDMAL110R0		Endangered	G1	S1.1	1B.1

U.S. Department of Homeland Security
1111 Broadway, Suite 1200
Oakland, CA 94607-4052

FEMA

April 2, 2010

Ms. Susan Moore
Field Supervisor
U.S. Fish & Wildlife Service
Sacramento Valley Branch
2800 Cottage Way, Room W-2605
Sacramento, CA 95825

RE: EMW-2009-FC-05324
Rough and Ready Fire Department

Dear Ms. Moore:

The Department of Homeland Security – Federal Emergency Management Agency (FEMA) is considering an American Recovery and Reinvestment Act (ARRA) Assistance to Firefighters Grant (AFG SCG) application to the Rough and Ready Fire Department (Grantee). The Department intends to construct a new fire station at 14506 Rough and Ready Highway, (T16N R18E, Section 24), Rough and Ready, Nevada County, California. The new building would cover a footprint of 8,167 square feet and contain five (5) engine bays. The total build-out would cover 2.5 acres of flat and gently sloping land. The site has been previously disturbed and is vegetated primarily with weedy species among some mixed oak and ponderosa pine. Elevation of the site ranges from 1,870 to 1,900 feet. The Grantee has provided FEMA with a Biological Inventory for the proposed construction site. Field work for the proposal was done during August and September of 2009 and it was reported that the site contains marginally suitable habitat for one special-status plant species, Brandegee's clarkia. This species is known to exist in the area but was not found within the proposed construction site. In accordance with Section 7 of the Endangered Species Act (16 U.S.C. §1531 et seq. (1973)), FEMA has made a finding that the Grantee's proposed construction of a fire station will have no effect on Federally listed endangered or threatened species or the modification of any critical habitat.

The Grantee has been made aware of the need to comply with the Migratory Bird Treaty Act of 1918. However, due to the high level of disturbance and human activity at the site it is unlikely that sensitive raptor or owl species nest in or within close proximity to it.

We, therefore, request your concurrence with our determination and anticipate your response within 30 days of receipt of this letter otherwise we will assume concurrence and may provide the assistance. If you need any further information please contact Donna M. Meyer, Deputy Regional Environmental Officer at (510) 627-7728 or donna.meyer@dhs.gov.

Sincerely,

for Alessandro Amaglio
Regional Environmental Officer

Enclosures

Ric Windmiller

CONSULTING ARCHAEOLOGIST

2280 GRASS VALLEY HIGHWAY #205
AUBURN, CALIFORNIA 95603

530/878-0979
FAX 5301878-0915

October 8,2009

Rough & Ready Fire Protection District
11042 Rough and Ready Road
Rough'and Ready, CA 95759

Attn: Mr. Don Gannon, Chief
Re: Cultural Resources Addendum, Fire Station Construction Project

Dear Mr. Gannon:

In July, 2009, we completed a cultural resources assessment for local County review under California Environmental Quality Act (CEQA) statutes, guidelines and advisories. The cultural resources study focused on the two adjacent parcels (APN # 052-270-019 and 052-270-028) on which your Fire District plans to construct a new fire station and ancillary facilities including parking and a leach field. Our study identified one historic archaeological resource located on the east boundary of APN# 052-270-028 and we concluded that because it is located away all proposed construction, it would not be impacted by the planned project.

However, as the proposed construction project is located within the historic townsite of Rough and Ready, which is listed as California Historic Landmark #294, we found that the landmark had never been evaluated for California Register of Historical Resources or National Register of Historic Places eligibility. These are two accepted means of evaluating the significance of a cultural or historical resource. At the time, we contacted the North Central Information Center, California Historical Resources Information System, which was the agency that conducted the cultural resources records search for us. Information Center staff indicated that the Landmark listing was an old one and that it is not uncommon to find an older listing that has not been evaluated for either California or National Register eligibility. Information center staff directed us to consult with the California Office of Historic Preservation (OHP) to verify that the townsite had never been formally evaluated for either register. OHP staff did concur that the townsite had not been evaluated. These two consultations focused narrowly on the issue of whether or not a previous evaluation had been made, and on the point that since no formal evaluation had ever been made, a determination of the potential effect of the proposed project on the historical landmark could not be made. This is where our report of July, 2009 ended.

In the meantime, we've worked with you to prepare a second study specifically designed to address the cultural resource issues to assist the Department of Homeland Security in meeting its obligations under Section 106 of the National Historic Preservation Act, as amended. As a consequence, I consulted further

with Office of Historic Preservation staff to see if there was an alternative to evaluating the entire Rough and Ready townsite for California and/or National Register eligibility before determining the potential effect of the project on the historic landmark.

OHP staff directed me to return to the project site and document the immediate viewshed surrounding your proposed construction project. We interviewed the immediate neighbors to gain information on construction dates and the uses of buildings and facilities in the immediate vicinity and we documented the surroundings with photographs, all of which are included in our September, 2009 technical report for federal review, "Rough & Ready Fire Department Construction Project, Cultural Resources Inventory and Evaluation, Rough & Ready, Nevada County, California."

In that report, our section, "Determination of Effect," treated the potential effect of the proposed project on the Rough and Ready townsite, California Historic Landmark #294 as follows:

> Few buildings dating to the townsite's period of significance remain in Rough and Ready. The site where the new fire station is planned (APN #052-270-019) has an existing structure, the Cramer building with a construction date of 1968 (Don Gannon, personal communication 7/10/2009). This building was a gas station with a false front built to depict two side by side buildings of historic character (see Appendix C: Photographs).
>
> On the parcel immediately west of the construction site (14526 Rough & Ready Highway) is a small chapel and a separate small wood frame residence of no particular architectural style that houses a sculpture studio. The chapel was constructed in 1959 and the adjacent small wood frame studio was built shortly afterwards–and more recently expanded, according to the present tenant (Maya Hill, personal communication 9/19/2009). Both buildings are largely obscured from view by trees.
>
> Southwest, across Rough and Ready Highway, is a modem trailer park. Directly across Rough and Ready Highway from the fire station construction site is the Rough and Ready Country Store, a large single story building with a full length covered porch on a concrete slab. On the adjoining lot east of the store is the modern post office.
>
> On a small triangular shaped lot immediately east of the fire station construction site is the reconstructed Fippins Blacksmith Shop owned by the Rough & Ready Chamber of Commerce. Although the original Fippins Blacksmith Shop was built in the mid-1850s, the current building is clad in mixed siding of various styles and ages. The west elevation is clad in board and batten. On the north elevation, siding varies from old to brand new vertical boards of various widths and condition. The east elevation supports a new shed roof extension that shelters a historic logging wagon. The front (south) elevation facing Rough and Ready Highway consists of painted horizontal board siding of two different styles. Siding all around the building is attached with a mix of wire nails and sheet rock screws. The roofing is galvanized corrugated iron. It is not apparent whether the

efforts at the blacksmith shop were a restoration or a reconstruction. It is apparent that the efforts were not consistent with the Secretary's Standards and Guidelines for Rehabilitating Historic Buildings.

On the adjacent lot to the north set back from Rough and Ready Highway by several hundred yards is a medium size ranch style house cloaked from view by trees and fences. The address is 14508 Rough & Ready Highway.

It is the consultant's opinion that the immediate setting of the proposed new fire station is not representative of Rough & Ready during its period of significance.

The consultant seeks concurrence from the Department of Homeland Security and the State Historic Preservation Officer that no historic properties will be affected by the proposed undertaking.

The foregoing is an excerpt from our September, 2009 technical report: "Rough & Ready Fire Department Construction Project, Cultural Resources Inventory and Evaluation, Rough & Ready, Nevada County, California." The immediate surroundings of the proposed fire station consist of a broad mixture of buildings representing divergent architectural styles (or no style) from different periods, most of which appear to be post-World War II and recent. The Office of Historic Preservation's little book, California Historical Landmarks, describes Landmark #294 as, "The little town of Rough and Ready: Established in 1849 and named in honor of General Zachary Taylor, after the Rough and Ready Company of miners from Wisconsin, this was one of the principal towns of Nevada County. In 1850, articles of secession were drawn up establishing the 'Republic of Rough and Ready.' As a result of disastrous fires, only a few structures remain today that were built in the 1850s."

Integrity or the ability of either an individual historic site or building, or a portion of a historic district to convey its historical importance is an important measure of its significance under CEQA as well as its eligibility for the National Register. It is this consultant's opinion that the immediate viewshed surrounding the proposed fire department construction project with its mixture of newer and older structures fails to convey the historical importance of Rough and Ready during the town's acknowledged period of significance of the mid-1800s.

Therefore, based on these observations, I can conclude that the proposed construction project will have no adverse effect on historical resources. However, I still recommend if any buried archaeological resources are uncovered during the construction project, however unlikely, that a qualified archaeologist be retained to evaluate the significance of the find(s) and recommend appropriate mitigation, if any.

Yours sincerely,

Ric Windmiller, R.P.A.

U.S. Department of Homeland Security
1111 Broadway, Suite 1200
Oakland, CA 94607-4052

FEMA

April 2, 2010

Mr. Milford Wayne Donaldson, FAIA
State Historic Preservation Officer – Office of Historic Preservation
P.O. Box 942896
Sacramento, CA 94296

RE: EMW-2009-FC-05324

Dear Mr. Donaldson:

The Department of Homeland Security – Federal Emergency Management Agency (FEMA) is considering an American Recovery and Reinvestment Act (ARRA) application to the Rough and Ready Fire Department (Grantee) to provide financial assistance for the construction of a new 8,167 square foot, five-engine bay fire station. The station will be located at 14506 Rough and Ready Highway, Rough and Ready, Nevada County (39°13'789"N; -121°8'308"W; T16N,R7E,Sec248). The Grantee's proposal would provide a larger, adequate and safe station to one of the few remaining all-volunteer departments in the county. In accordance with 36 CFR Part 800.4(a)(1), FEMA has identified an Area of Potential Effect (APE) as the Assessor's Parcel Number 52-270-41 for a total of 2.5 acres.

FEMA has made a finding that historic properties are present but the Grantee's proposal would have no effect on them pursuant to 36 CFR Part 800.4(d)(1). We have enclosed documentation in support of our finding in accordance with 36 CFR Part 800.11(d).

If you have any questions or require additional information please do not hesitate to contact me at (510) 627-7728.

Sincerely,

for Alessandro Amaglio
Regional Environmental Officer

Enclosures

DOCUMENTATION –HISTORIC PROPERTIES NO EFFECT

1) A description of the undertaking, specifying the Federal involvement, and its area of potential effects, including photographs, maps, drawings, as necessary;

The Department of Homeland Security – Federal Emergency Management Agency intends to provide an American Recovery and Reinvestment Act (ARRA) grant to the Rough and Ready Fire Department. A new 8,167 square foot single-story, 5 engine bay station with ancillary facilities will be constructed on a 2.5 acre site located at 14605 Rough and Ready Highway, Nevada County. The new station would fulfill a critical need for the 22-person all-volunteer fire department. The Area of Potential Effect (APE) has been identified by FEMA as the 2.5 acre site identified by Assessor's Parcel Number 52-270-41.

2) A description of the steps taken to identify historic properties, including, as appropriate, efforts to seek information pursuant to § 800.4(b)

A search of the National Register of Historic Places (NRHP) was performed. No properties in Rough and Ready are listed on the NRHP. In September 2009, the Grantee retained the services of an archaeologist to perform a Cultural Resources Inventory and Evaluation for the proposed fire station. Efforts to identify historic properties included a records search by the North Central Information Center, California Historical Resources Information System; oral interviews with Rough and Ready residents; and contact with Native American tribes; archival research and archaeological field inspection.

3) The basis for determining that no historic properties are present or Affected

The APE is located within the boundaries of the Rough and Ready townsite which is listed as California Historical Landmark No. 294. However, consultation with the Office of Historic Preservation (OHP) concluded that although the landmark was never evaluated for listing on the NRHP, little of the original town remains. The immediate viewshed contains predominately modern structures. However, a non-conforming reconstruction of an 1850's blacksmith shop is located within the project area. The building would remain in place with the Grantee's proposal.

During fieldwork by the Grantee's consulting archaeologist one historic archaeological feature was identified. A quarried granitic rock retaining wall marks the location where historic houses once stood. A Determination of Eligibility was documented by the consultant who determined that the formation could likely meet Criterion D. This feature lies along the east boundary and uphill from the construction site. Construction activities in this area include a small amount of parking which would be located 20-30 feet below the wall's elevation and the new fire station would be located approximately 150 feet away from the remnant. The retaining wall would remain in place so construction activities are not anticipated to directly or indirectly impact the formation. Therefore, FEMA has made a

finding that the construction of the proposed fire station will have no effect on historic properties. A copy of the Evaluation is enclosed.

The consulting archaeologist contacted the Native American Heritage Commission and received a listing of Native American individuals and organizations that may have knowledge of cultural resources in the project area. Contact with tribes was made but no responses were received. But because government to government consultation is required in accordance with 36 CFR Part 800.2(c) by the Federal Agency, FEMA will re-initiate consultation with Native American tribes in the project area.

STATE OF CALIFORNIA – THE RESOURCES AGENCY

ARNOLD SCHWARZENEGGER, *Governor*

OFFICE OF HISTORIC PRESERVATION
DEPARTMENT OF PARKS AND RECREATION
P.O. BOX 942896
SACRAMENTO, CA 94296-0001
(916) 653-6624 Fax: (916) 653-9824
calshpo@ohp.parks.ca.gov
www.ohp.parks.ca.gov

April 30, 2010

Reply In Reference To: FEMA100415A

Donna Meyer
Deputy Historic Preservation Officer
U.S. Department of Homeland Security
1111 Broadway, Suite 1200
Oakland, CA 94607-4052

RE: Section 106 Consultation for American Recovery and Reinvestment Act (ARRA)-Funded Fire Station Construction, 11042 Rough and Ready Highway, Rough and Ready, CA

Dear Ms. Meyer:

Thank you for consulting with me pursuant to 36 CFR Part 800, the implementing regulation of Section 106 of the National Historic Preservation Act of 1966 (16 U.S.C. 470f), as amended. On behalf of The Department of Homeland Security – Federal Emergency Management Agency (FEMA), you are seeking my concurrence that the above-referenced undertaking will not affect historic resources.

FEMA is considering an ARRA application to the Rough and Ready Fire Department to provide financial assistance to construct an 8,167 square foot single-story fire station. The new station will be built on a single parcel directly adjacent to Rough and Ready Highway, while a paved access route and a leach field will be sited on a second undeveloped parcel behind the new station. In addition to your letter, you have provided a project description, an artist's rendition of the proposed station, and the following report in support of this undertaking:

- *Rough & Ready Fire Department Construction Project, Cultural Resources Inventory and Evaluation, Rough & Ready, Nevada County, CA* (Ric Windmiller: September, 2009)

The *Cultural Resources Inventory* document chronicles efforts to identify historic resources. These efforts include a pedestrian survey of the project area, a records search conducted at the North Central Information Center, and evidence of Native American consultation. Having reviewed this information, I have the following comments:

1) I concur that the Area of Potential Effects (APE) has been properly determined and documented pursuant to 36 CFR Parts 800.4 (a)(1) and 800.16 (d);

2) I further concur that the finding of No Historic Properties Affected is appropriate pursuant to 36 CFR Part 800.4(d)(1) and that the documentation supporting this finding has been provided pursuant to 36 CFR Part 800.11(d);

3) The western end of a two-foot high rock retaining wall is sited along the east boundary of the rear parcel. Archaeologist Rick Windmiller notes that the wall likely dates from the nineteenth century and may be eligible for listing on the National Register of Historic Places. However, the wall is located well out of the way of the proposed construction, including the leach field. As a precautionary measure, Windmiller recommends that temporary fencing be put in advance of construction to avoid accidental damage to the wall. I agree that this protective measure should be implemented.

4) Be advised that under certain circumstances, such as an unanticipated discovery or a change in project description, you may have additional future responsibilities for this undertaking under 36 CFR Part 800.

Thank you for considering historic resources during project planning. If you have any questions or comments, please contact Tristan Tozer of my staff at (916) 653-8920 or by email at ttozer@parks.ca.gov.

Sincerely,

Susan K Stratton for

Milford Wayne Donaldson, FAIA
State Historic Preservation Officer

Pacific Gas and Electric Company

WE DELIVER ENERGY.

May 12, 2010

Ivy Construction
Bruce Ivy
143A Springhill Drive
Grass Valley, CA 95945

Re: Rough & Ready Fire Department
14506 Rough & Ready Highway – Rough & Ready
Project Management Number: 30721335
Notification Number: 103770988

Bruce,
This letter is confirmation that all work to be performed by PG&E in relation to the proposed project for the Rough & Ready Fire Department, has been identified. All work identified to be completed will be done on-site and will not require additional off-site improvements.

Please feel free to contact me if you have any further questions.

Thank you,

Lee Wells
Senior New Business Representative
Pacific Gas & Electric Company
Engineering & Planning
788 Taylorville Rd.
Grass Valley, CA 95945

530-477-3260 Office
530-477-3252 Fax
lpw3@pge.com

BRUCE IVY
CONSTRUCTION

Rough and Ready Fire Department
11042 Rough and Ready Road
Rough and Ready, CA 95975

05/05/10

Re: Solid Waste
Rough and Ready Fire Department Proposed Project
14506 Rough and Ready Highway
Rough and Ready, CA 95975

The demolition of the existing structure on your proposed project site will indeed generate solid waste. The estimated quantities are as follows:

1.	Existing Building	90 tons
2.	Building Foundation*	45 tons
3.	Concrete Driveway*	37 tons
4.	Asphalt Driveway*	78 tons

***Material to be hauled to Hansen Bros. Enterprises for recycling**

All of the construction demolition waste mateial that is not recycled will be hauled to the local construction waste disposal facility located on McCourtney Road in Grass Valley.

All of the construction waste generated during the building construction that can be recycled will be (this project is seeking LEED certification and recycling is a requirement), and all other solid construction waste will be delivered to the construction waste disposal facility located on McCourtney Road in Grass Valley.

We do not anticipate encountering any hazardous waste materials, but in the event we do all local and state laws will be followed in determining the proper disposal method.

Sincerely

Bruce Ivy

Bruce Ivy

\r&r\dispea

143A SPRINGHILL DRIVE, GRASS VALLEY, CA 95945 • 530.272.2135 • FAX 530.272.3925 • bruceivy@sbcglobal.net • SCL #336270